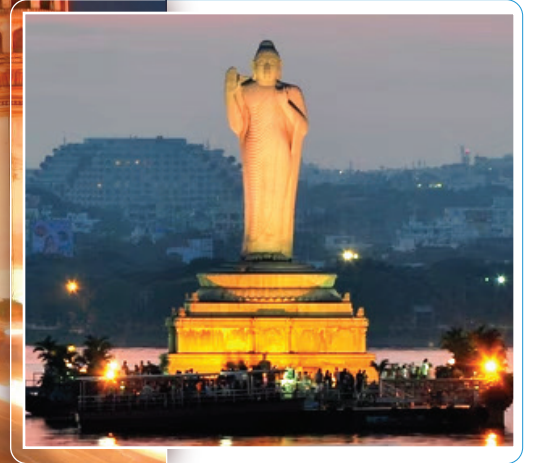


Abstract Souvenir Booklet



Silver Jubilee Conference on
Pulmonary Diseases Under the Aegis of Indian Chest Society &
National College of Chest Physicians (India)

Theme: Regaining Lungs. Renewing Lives

30th November, 1st, 2nd & 3rd December 2023 at Hyderabad International Convention Centre



Dr R Vijai Kumar

Organizing Chairman
NAPCON 2023, Hyderabad
President, ICS

From the Chairman's Desk

All good things start small, and not just small, but imperfect too. Remember the Wright brothers who invented the aeroplane? Well, the first model of the aeroplane that was made after a lot of planning and engineering fell flat after flying for a few yards. That is right, just a few yards. But they dared to dream that it is possible to fly in air. Now air travel, even a transatlantic non-stop flight all the way from Hyderabad to the United States is commonplace.

I believe that for a young postgraduate trainee in medicine, preparing an abstract is similar to the first experiment of the Wright brothers. While instant success may not be imminent, in the long run it will guarantee him or her a leadership role in the field, not to mention the adulation and glory that will follow.

Conferences, especially national conferences in the respective fields, do take place periodically, many times annually, and postgraduates should seize the moment and participate. The best way to participate is to submit an abstract. It could even be your thesis or dissertation. The very exercise of preparing the abstract, going through the study in detail, the statistics involved are superbly educational. If the abstract has an original research idea with a good number of patients, then there is a good chance that the abstract may be accepted for an oral presentation.

The journey of a thousand miles begins with the first step. With that first-ever oral presentation before a crowd of your colleagues and seniors, you will overcome your fears, and it is only a matter of a few more talks that you will be recognized as a star performer.

This year for the Silver Jubilee NAPCON 2023 at Hyderabad, we have received close to 1,100 abstracts, and it was very difficult to reject any one abstract, because all were of good quality. Every abstract was sent to a group of reviewers who critically went through them and made suggestions that could improve the quality of these abstracts. After making those vital corrections, almost 100 abstracts were invited for an oral presentation. The organizers decided that the three best presentations would be awarded cash prizes.

At this juncture, I must acknowledge the stellar role played by Dr Tirunagari Lakshmi Narasimha Swamy, at every step of this humongous exercise, which was executed in a flawless manner, ably assisted by his team members.

I congratulate every single participant who contributed to the abstracts, and am sure that these 1,100 candles will glow bigger and bigger and eventually engulf the specialty with all the knowledge and growth.

"What comes easy won't last, but what lasts, won't come easy."



Dr Subhakar Kandi

Organizing Secretary
NAPCON 23, Hyderabad

Message from Organizing Secretary

I welcome all the distinguished delegates and the esteemed faculty to the first-ever NAPCON 2023 at Hyderabad, with all humbleness and happiness.

Continuous learning is a minimum requisite for the survival and success of any professional, particularly if the field of their interest is going through a sea change. The same is the case with Pulmonology, which with its unparalleled growth off late, has started demanding a high level of self-updating to keep pace with the frequent advancements. What better way can there be to educate oneself with all the new developments and latest happenings in pulmonology than its one and only premier conference “NAPCON” held under the auspices of national bodies like ICS and NCCP.

In any learning process, apart from listening to the bigwigs and experts in the field, an inquisitive study of the research studies happening in the field should be an integral part. The 1,000 odd papers being presented in this conference, particularly by the budding enthusiastic professionals bubbling with new Ideas, provide such an opportunity to the seeking delegates.

I sincerely commend the tremendous initiative and wonderful act of the Abstract Committee led by Dr TLN Swamy and his able Team of compiling the selected best 100 abstracts as well as the whole list of the rest of the papers presented in the conference.

I take this opportunity to also thank all the faculty and the delegates attending the conference, the learned dignitaries and my earnest colleagues, who have helped to make this conference a huge success.

MESSAGE

Deepak Talwar
Hon Secretary Indian Chest Society

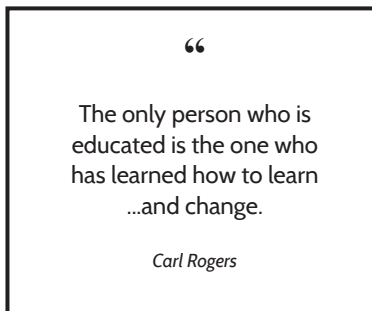


TO ALL MY DEAR PULMONARY MEDICINE FRATERNITY

NAPCON 23:

A joint conference of NCCP and ICS is around the corner and this mega event promises to bring the best of Pulmonary, Allergy, Sleep, Interventions and Critical Care Medicine in 4 days from 30 November - 03 December 2023 at Hyderabad.

I'm reminded of the famous saying ...



which itself testifies the wisdom of our respiratory societies to bring change by education and continuous learning. NAPCON has always been our conference to meet national and international participants and take-home deep knowledge with us thereby enhancing our clinical skills to improve patient outcomes.

Medley of International & National experts:

Three days of power packed NAPCON-23 program promises to fill gaps in our understandings in each and every sphere of 'Pulmonology'. I believe what Albert Einstein said,

'Intellectual growth should commence at birth and cease only at death.'

I am going to be there and let's enjoy the feast of information in all aspects of 'Pulmonary Medicine' besides opportunity of networking with like-minded friends and colleagues.

Needless to add, we will have time to enjoy in the evenings with rich cultural programs from Telangana and Andhra Pradesh and tickle out tase buds with Hyderabad cousin.

See you all at NAPCON 2023 and let's make it successful as never before

Dr. Deepak Talwar
Director & Chairman
Metro Center Respiratory Diseases



Dr. Gautam Bhagat
President,
National College of Chest Physicians (India)

From NCCP (I) President's Desk

Dear esteemed colleagues,

I hope this message finds you well. As the President of our cherished society, it is with great pleasure and anticipation that I extend my heartfelt wishes for the success of our upcoming annual national conference, a highlight of our calendar year.

Our society has always been a beacon of knowledge and progress and this conference is a testament to our commitment to furthering our mission. It brings together the best and brightest minds in our field to exchange ideas and insights that will shape the future.

I believe that this year's conference will be a resounding success, further strengthening our bonds, fostering innovations and promoting positive changes in our field. I want to extend my heartfelt gratitude to the organizing committee, speakers and all the members who have been working tirelessly to make it all possible. I have no doubt that the event will be an unforgettable experience and I eagerly await the knowledge and inspiration that will emerge from it.

I encourage each one of you to actively participate, engage in meaningful discussions and make the most of this incredible opportunity. Let us leverage the collective wisdom and expertise gathered here to contribute to the growth of our society and community at large.

Wishing you all a fruitful, enlightening and successful NAPCON 2023. Let us inspire one another, learn from each other and leave this conference with a sense of achievement and purpose.

With warm regards,

Dr Gautam Bhagat
President
National College Of Chest Physicians



Prof. Dr. S. N. Gaur
Secretary, National College of Chest Physicians (India)

From NCCP (I) Secretary's Desk

The Indian Chest Society and National College of Chest Physicians (India) have this year entrusted Dr. R. Vijaikumar, Organizing Chairman and Dr. Subhakar Kandi as Organizing Secretary to host the biggest annual national conference of the specialty of Pulmonary Medicine – i.e. 25th NAPCON - 2023 at Hyderabad, under the aegis of Indian Chest Society and National College of Chest Physicians (India), which is scheduled from November 30 to Dec., 03, 2023 at Hyderabad International Convention Centre, Hyderabad, with 25 workshops (being silver jubilee of NAPCON) on the first day at different institutions of Hyderabad. The main Conference will have Guest Lectures, Symposia, Honored Lectures, Debates on Controversies, Panel Discussions, and Meet the Professor sessions on recent advances in Pulmonary Medicine, Critical Care and Sleep Medicine to provide update on relevant topics concerning the specialty of Pulmonary Medicine. We will have 4 Orations from National College of Chest Physicians India and 4 from Indian Chest Society and one Lifetime Achievement Award from each ICS and NCCP(I) as well as Young Scientist Award sessions and Fellowship Awards of both associations.

I am happy to inform you that all the last twenty four NAPCONs were grand success, appreciated by the members as well as the foreign faculty/delegates. I am sure that the same sprit will continue and we will have more and more participation in future conferences. As in past, we are expecting a good number of foreign faculties in NAPCON-2023 from ACCP, ATS, APSR, Srilanka, Nepal and Bangladesh Respiratory societies as well as delegates from neighboring countries.

Dr. R. Vijaikumar and Dr. Subhakar Kandi along-with his team members have put in their best efforts to organize this conference as physical conference in a manner to make it really a most memorable academic event commemorating 25th (silver jubilee) napcon On behalf of the National College of Chest Physicians (India) and on my personal behalf, I thank Dr. R. Vijaikumar, Organizing Chairman, Dr. Subhakar Kandi, Organizing Secretaries and other members of the Organizing Committee for their sincere efforts and hard work, as well as Dr. Randeep Guleria, Chairman, Scientific Committee for drafting an attractive state-of-the-art scientific programme for NAPCON 2023. I am positive that the event will be a grand academic feast, and will be remembered by all.

I welcome you all to NAPCON-2023 at Hyderabad and wish the conference grand success.

Dr. S. N. Gaur, Secretary, NCCP (I)



Dr. Randeep Guleria

FROM THE DESK OF SCIENTIFIC COMMITTEE CHAIRMAN

Dear Esteemed Colleagues and Participants,

It is with great pleasure and enthusiasm that I extend my warmest welcome to each one of you to the Souvenir of the National Conference on Pulmonary Diseases (NAPCON). As the Chairman of the Scientific Committee, I am honored to be a part of NAPCON 2023, an event that brings together experts, researchers, and practitioners in the field of pulmonary medicine.

Our collective commitment to advancing knowledge, sharing insights, and fostering collaboration has made this conference a cornerstone in the realm of pulmonary diseases. This year's silver jubilee gathering promises to be an exciting and intellectually stimulating experience, offering a platform for the exchange of cutting-edge research, innovative ideas, and best practices in the field.

The diverse array of topics and presentations featured in the conference reflects the breadth and depth of our shared dedication to improving respiratory health. From the latest advancements in diagnostic techniques to groundbreaking therapeutic approaches, the conference will provide a comprehensive overview of the current landscape of pulmonary medicine.

I encourage all participants to be actively engaged in the discussions, workshops, and networking opportunities available throughout the event. Your contributions, insights, and perspectives are invaluable in shaping the future of pulmonary healthcare by fostering an environment of open dialogue and collaboration; we can collectively address the challenges in our field and work towards innovative solutions.

I look forward to fruitful discussions, meaningful interactions, and the advancement of knowledge that will undoubtedly arise from this gathering. I wish the National Conference on Pulmonary Diseases (NAPCON) 2023 at Hyderabad be a source of inspiration, learning, and camaraderie for all.

See you all at Hyderabad!

Best regards,

Dr. Randeep Guleria

Chairman Scientific Committee

NAPCON, Hyderabad



Dr TLN Swamy

Chairman, Abstracts & Papers
Committee-NAPCON 23, Hyderabad

From the Chairman of Abstracts and Papers Committee

*“Knowledge cannot excel without wisdom
Wisdom cannot exist without knowledge”*

One has to be not just knowledgeable, but also wise. Getting wiser, however, requires acquiring knowledge first. Knowledge can be acquired through many different ways of learning like studying and referring to relevant information, but wisdom can only be imbibed by way of listening to the Learned Ones and discussing with the Experts. Conferences like this offer such an environment to listen to the scholars and dissertate with the intellectuals, including many young minds.

The purpose of an academic conference is not just to offer knowledge alone but to also confer wisdom to the true participant. With that intent in mind, we, the members of the Abstract Committee, have tried our best to catch hold of thought-provoking scientific studies, interesting and enlightening case reports from every possible practitioner of Pulmonology, who has to be a student to start with and last to be a researcher inevitably. Postgraduate students in particular, with their immense zeal and enthusiasm to unfold new territories and unravel old mysteries, provide the brainstorming needed for new inventions and remedies.

Our efforts yielded an overwhelming response attracting over 1,000 abstracts from all corners of the country and also abroad. After a Herculean effort to peer review all those abstracts and fine-tuning them for presentation in the conference, we wanted to bring out the essence in the form of a souvenir, especially to help those who could not attend the conference. This can help to interact with the presenters, if anyone is interested in their research work.

I sincerely acknowledge the immense support, in every possible aspect, provided by my team members – Dr Latha Sharma, Dr Sudhir Prasad, Dr CN Prasad, Dr Anita Bhatt and all Peer Reviewers, who made this gigantic task possible. We are immensely thankful to Dr Shubhakar Kandi for guiding us and helping out in every possible way including the Review process and Dr R Vijai Kumar for his timely invaluable advice.

On behalf of the Abstract Committee, I extend sincere thanks to the Organizing Committee of NAPCON 23, Hyderabad conference being held under the aegis of ICS and NCCP(I) and all the distinguished delegates attending the conference for making it an enormous success story.

Organizing Committee – NAPCON 23, Hyderabad



Dr R Vijai Kumar
Organizing Chairman



Dr Subhakar Kandi
Organizing Chairman



Dr Narendar Methuku
Treasurer



Dr Randeep Guleria
Scientific Committee
Chairman



Dr Ashfaq Hasan
Workshops National
Coordinator



Dr E Ravindra Reddy
Joint Secretary



Dr Sudhir Prasad
Joint Secretary



Dr Hari Kishan Gonuguntla
Joint Secretary



Dr Nagarjuna Maturu
Scientific Committee
Coordinator

Abstracts and Papers Committee – NAPCON 23, Hyderabad



Dr R Vijai Kumar
National Advisor



Dr Subhakar Kandi
National Coordinator



Dr TLN Swamy
Chairman



Dr Latha Sarma
Coordinator



Dr CN Prasad
Vice Chairman



Dr Anita Bhatt
Secretary



Dr Sudhir Prasad
Joint Secretary



Dr Srikanth Goud
Member



Dr Narayana
Member



Dr Sowjanya
Member



Dr Ilyas Khan
Member

Oral Papers: NAPCON Award

OP-No.: 1

Prevalence of Overt and Concealed Chronic Renal Impairment and its Correlation with Clinico-functional Profile in COPD Patients

Author – Dr CH Nidhi Sumedha

Background and Objectives: Chronic obstructive pulmonary disease (COPD)-linked comorbidities and their influence on associated outcomes have been investigated, but the extent to which COPD is related to chronic renal impairment is undetermined. Our objective is to assess prevalence of renal impairment in different groups of COPD (GOLD) and its correlation with clinico-functional profile.

Methods: A total of 112 subjects were taken and divided into Group A, Group B, Group E based on GOLD guidelines and estimated glomerular filtration rate (eGFR) was calculated using Cockcroft-Gaul formula for every 3 months, along with collection of clinical and spirometrical data. The prevalence of the renal status types by eGFR was examined in all groups, and the correlations of serum creatinine and eGFR with all of the clinical and spirometry data were examined.

Results: There were significant differences in renal status among the 3 groups; the percentage of subjects with concealed chronic renal failure was significantly greater in Group E. Additionally, the percentages of subjects with concealed chronic renal impairment were greater than those with overt chronic renal failure in the 3 groups. There were significant correlations of serum creatinine with COPD assessment test, exacerbations and hospitalizations, percent-of-predicted forced vital capacity (FVC), percent-of predicted forced expiratory volume in 1 second (FEV1)/FVC, percent-of-predicted maximum mid-expiratory flow, and percent-of-predicted peak expiratory flow. Moreover, there were significant correlations between eGFR and all of the clinical and spirometry data.

Conclusion: Chronic renal impairment should not be ignored or underestimated in patients with COPD because it frequently cannot be recognized based on serum creatinine because decreases in eGFR are more prevalent.

Keywords: COPD, concealed and overt chronic renal impairment, eGFR

OP-No.: 2

Obstructive Sleep Apnea: Correlation of Brain Natriuretic Peptide Levels with Cardiovascular Diseases

Authors – Dr Nazia Uzma, Dr Ashfaq Hasan, Dr C Narasimhan

Rationale: Obstructive sleep apnea (OSA) is a common condition being increasingly recognized and is associated with long-term morbidity and mortality. Very few data are available for Indian population and public health hazard of the condition continues to be seriously underestimated in this country. OSA is accompanied by episodic increases in left ventricle afterload due to large negative swings in intrathoracic pressure and repetitive surges in arterial pressure. Brain natriuretic peptide (BNP) is released by ventricular myocytes in response to pressure and volume overload. The objective of this study was to evaluate dose-response relationship between severity of OSA and plasma BNP concentration with the risk of cardiovascular diseases.

Methods: The study involved 225 OSA patients and 75 healthy controls. A standard full-night polysomnography was performed in study population. OSA defined as having an Apnea-Hypopnea Index (AHI) of ≥ 5 per hour of sleep and depending on AHI, OSA patients were divided into 3 categories. Participants with an AHI < 5 constituted the comparison group. In this study, the change in BNP levels from morning to evening was recorded (between 8 am and 10 am, and 8 pm-10 pm). Plasma BNP was measured by fluorescence immunoassay quantification.

Results: The results of the assay showed that the average concentration of BNP (evening and morning) increased significantly with severity of OSA, the BNP levels in morning samples significantly increased than evening. Log transformed overnight BNP values showed that maximum change in nocturnal to diurnal BNP occurred for severe OSA patients; however, least concentration of BNP was found in healthy individuals (control group). Among OSA subjects (entire cohort), very strong positive correlation with statistical significance was revealed for BNP with independent predictors such as AHI ($r = 0.957$, $p = 0.001$), BMI ($r = 0.951$, $p = 0.003$) Epworth Sleepiness Scale (ESS) ($r = 0.894$, $p = 0.004$), Δ SBP/DBP ($r = 0.882$, $p = 0.001$) and LF/HF ratio of HRV ($r = 0.902$, $p = 0.002$).

Conclusions: The findings of the study established a dose-response relationship between increasing severity of OSA and elevated plasma BNP concentration. The increase in BNP with severity of OSA shows that patient in this category are at a higher risk of cardiovascular diseases.

Keywords: Obstructive sleep apnea, brain natriuretic peptide, cardiovascular diseases

OP-No.: 3

Prediction of Outcome with BAP 65 Score and DECAF Score in Patients of Acute Exacerbation of Chronic Obstructive Pulmonary Disease

Author – Dr Syed Afreen

Background and Objectives: Prognostic research in acute exacerbations of chronic obstructive pulmonary disease (AECOPD) requiring hospitalization has been limited and there appears to be little common ground between predictors of mortality and during AECOPD. Furthermore, none of the prognostic tools developed in stable disease have been tested on hospitalized patients, and most require clinical measurements not routinely available at hospital admissions, so this study planned. This study intends to test dyspnea, eosinopenia, consolidation, acidemia, and atrial fibrillation (DECAF) score and Biological Assessment Profile [BAP]65 score in tertiary care set up and validate the same to be used as a routine and effective score in predicting the outcome in AECOPD.

Methods: Hospital-based cross-sectional study was carried out in 100 patients admitted with primary diagnosis of AECOPD in GGCH. BAP-65 score and DECAF score were calculated. Data was analyzed using SPSS 22 version software.

Results: In this study, both BAP-65 score and DECAF score performed equally for prediction of need for mechanical ventilation. The AUC for need for mechanical ventilation was 0.77 for BAP score and 0.75 for DECAF score. The AUC for prediction of mortality for BAP-65 score Score was 0.79 and DECAF score was 0.81.

Conclusions: BAP-65 and DECAF score are not only good but also equal in predicting mortality as well as need for mechanical ventilation in AECOPD.

Keywords: Predictors of mortality, AECOPD, DECAF score, BAP-65 score, mechanical ventilation

OP-No.: 4

A Cross-Sectional Study on the Correlation of Serum IgE Levels, Absolute Eosinophil Count, Neutrophil-to-Lymphocyte with BODE Index in COPD Patients

Author – Dr A Shruthi

Background and Objectives: Chronic obstructive pulmonary disease (COPD) is currently the third leading cause of death in the world. Exacerbations are frequent events during the natural course of COPD and levels, neutrophil to lymphocyte ratio (NLR), and their major cause of morbidity and mortality. Our objective is to determine serum IgE levels, absolute eosinophil count (AEC), neutrophil-lymphocyte ratio (NLR) and their correlation with BODE index. This helps us assess severity of COPD according to clinical and functional outcomes helping in predicting future exacerbations and better management.

Methods: Hospital-based cross-sectional study. Patients were selected on the basis of inclusion and exclusion criteria. A detailed clinical history was obtained and a thorough clinical examination was done. Routine investigations were carried out - CBP, serum IgE levels, spirometry, ECG, chest X-ray. BODE index was calculated and patients divided into mild, moderate and severe groups.

Results: A total of 100 patients were enrolled of which 70 were males and 30 were females. The mean age of study population was 55 years. Serum IgE levels were raised in patients with higher BODE index, suggesting increasing inflammation and disease severity. AEC showed an inverse correlation with BODE index—higher counts were associated with lower BODE index scores and mild disease. No significant correlation was found between the NLR and BODE index.

Conclusion: This study provides initial insights into the relationship between IgE, AEC, NLR and BODE Index in COPD. These parameters with positive correlation can be used as potential biomarkers in assessing disease severity, progression and exacerbation. Understanding the correlation may have implications for disease management and personalized treatment strategies in COPD.

Keywords: COPD, IgE, AEC, NLR, BODE index

OP-No.: 5

A Longitudinal Study of Management of Adverse Drug Reactions and Outcome in Drug-resistant Tuberculosis Patients in a Tertiary Care Hospital in Hyderabad

Author – Dr Jaswanth Kumar

Background and Objectives: Drug-resistant tuberculosis (DR-TB) shows both favorable and unfavorable outcomes such as failure, lost to follow-up and mortality in the treatment. Adverse drug reactions (ADRs) caused by anti-DR-TB drugs may lead to noncompliance of treatment. The objective of our study is to evaluate the treatment outcomes of DR-TB patients on shorter oral bedaquiline-containing regimen and to determine the incidence and management of ADRs according to Programmatic Management of Drug-resistant Tuberculosis (PMDT) guidelines.

Methods: A total of 103 patients with multidrug-resistant TB (MDR-TB) were started on shorter oral bedaquiline regimen in accordance with the PMDT guidelines and followed up for ADRs and managed. Sputum conversion was checked by microbiological follow-up. At the end of the treatment, the outcomes of the treatment were recorded.

Results: Out of 103 patients, 41 patients (39.8%) were cured; 25 patients (24.3%) were treatment failed; 19 patients (18.4%) were lost to follow-up and 18 patients (17.5%) died. Out of 41 cured patients, 16 (39%), 13 (31.7%), 7 (17%) and 5 (12.2%) patients had bacteriological conversion at the end of third, fourth, fifth, and sixth month, respectively. A total of 19 (18.5%) patients experienced zero adverse effects, while 32 (31.1%), 43 (41.7%), and 9 (8.7%) patients experienced one, two, and four ADRs, respectively.

Conclusion: The frequency of unfavorable treatment outcomes was high among the study population. Early detection of ADRs and programmatic management will improve treatment compliance and fetch favorable outcome.

Keywords: Drug-resistant tuberculosis, bedaquiline, PMDT, treatment outcome

OP-No.: 6

A Comparative Study Between Virtual Bronchoscopy and Fiberoptic Bronchoscopy in the Diagnosis of Lung Lesions at a Tertiary Care Center

Author – Dr Ayisha Thasneem

Background and Objectives: Virtual bronchoscopy (VB) is a novel technique that makes use of 3-dimensional reconstruction of 2-dimensional helical CT images for noninvasive evaluation of the tracheobronchial tree. Fiberoptic bronchoscopy (FOB) remains the best modality for evaluating endoluminal and mucosal lesions. Although results of large studies showed the risks of purely diagnostic bronchoscopy to be relatively low, they cannot be completely ignored. This study aims at evaluating diagnostic accuracy of VB compared to FOB.

Methods: A total of 50 subjects were selected. A detailed history was taken, physical examination. Chest X-ray and CT-chest were performed. VB images were reconstructed using a commercial software. Abnormalities in the tracheobronchial tree were recorded. FOB was carried out in these patients and videos captured. The findings were evaluated, compared, and the results were analyzed.

Results: FOB was carried out in all 50 patients. The findings are as follows 20 (40%) subjects had airway obstruction due to external compression (by an extraluminal mass or by an enlarged lymph node). Among these, 15 (30%) subjects had endoluminal mass visible on the FOB, 8 (16%) had mucosal changes along the tracheobronchial tree, while 7 (14%) showed normal study. Based on the VB findings, 22 (44%) subjects were identified with obstruction due to external compression; 12 (24%) were identified to have endoluminal growth and 10 (20%) had normal study; while 0 (0%) mucosal lesions were identified in total 50 patients.

Conclusion: In comparison with FOB, VB offers the advantage of being able to visualize areas beyond even high-grade stenoses. Additionally, extraluminal causes of lumen compression can be analyzed better with virtual representation than with FOB. However, it was not possible to detect mucosal lesions and small infiltrates with VB.

Keywords: Fiberoptic bronchoscopy, virtual bronchoscopy, stenosis, obstruction, endoluminal mass

OP-No.: 7

Adherence to Inhalers in COPD Patients. A Cross-Sectional Study at a Tertiary Care Center

Author – Dr Syed Fayazuddin

Background and Objectives: Adherence to inhaled therapy appears to have a major impact on treatment goals, health status and disease control in chronic obstructive pulmonary disease (COPD). Aim of the study was to assess levels of adherence to inhalers, associations with COPD outcomes in patients.

Methods: Two hundred fifty-seven COPD patients were enrolled from tertiary health care in 2021-2022. Physicians used structured interviews and questionnaires to assess quality of life and disease status. Patients were classified into groups according to GOLD 2023 guidelines [based on COPD assessment test (CAT) and modified Medical Research Council (mMRC)]. Adherence to inhalers was measured with the test of adherence to inhalers (TAI). Multivariate linear and logistics regression models were used to assess adherence to inhalers with COPD outcomes, including CAT and mMRC scores, exacerbations and GOLD ABE status.

Results: Nearly 74.1% of COPD patients reported poor adherence, while most of them were characterized as deliberate noncompliers (69.5%). In multivariate analysis, COPD outcomes having significant associations with poor adherence included worse health status [OR (95% CI) 4.86 (1.61-14.69) and 2.93 (1.51-5.71) based on CAT and mMRC, respectively], having ≥ 2 exacerbations in the past year [4.68 (1.51-4.44)], and disease status, e.g., be in Group E [3.35 (1.24-9.09)] based on CAT and mMRC.

Conclusions: Poor adherence to inhalers prevalence in COPD patients of tertiary care center, with adherence influencing COPD outcomes. Raising awareness of patients and physicians on the importance of control and inhaler adherence may lead to interventions and improve outcomes.

Keywords: COPD, adherence, exacerbations, health status, GOLD 2023

OP-No.: 8

Ultrasound Guidance versus CT Guidance Biopsy for Peripheral Lung Tumor. Analysis of Safety and Diagnostic Yield at a Tertiary Care Center in Telangana

Author – Thipperisshetty Shravya

Background and Objectives: Peripheral lung tumors are tumors that are located within 3 cm of a costal pleural surface. According to WHO, it is estimated that lung cancer is the leading cause of cancer-related deaths worldwide. Our Objective is to compare ultrasound guidance and CT guidance biopsy for the diagnosis of peripheral lung tumors would determine which method is superior in terms of safety and diagnostic accuracy.

Methods: Among 40 image-guided thoracic biopsies obtained at our institution for 12 months, 20 are US-guided for lung lesions with pleural contact and 20 are CT-guided biopsies for lung lesions with pleural contact was identified. Biopsy type, final pathologic results, complications, number of passes, lesion diameter, procedural time, lesion diameter, and pleural contact are recorded.

Results: US-guided biopsy was associated with fewer complications than CT-guided procedures. Mean procedure times are shorter with US only than with CT. Procedural times were longer for patients with small lesions and those with lesser pleural contact. Sample adequacy was best when core biopsy was performed with US and CT. Fewer passes were performed with US guidance than with CT guidance, with a trend toward improved pathologic adequacy.

Conclusion: US guidance should be considered for biopsy of peripheral lung and pleural lesions because it is safer, faster, and possibly more accurate than CT guidance.

Keywords: CT, efficacy, image-guided lung biopsy, safety, ultrasound

OP-No.: 9

A Prospective Study on Prognostic Role of Blood Parameters in Community-acquired Pneumonia

Author – Dr Sai Teja Pothabattula

Background and Objectives: Community-acquired pneumonia (CAP) has a high rate of morbidity and mortality. Blood parameters like neutrophil, platelet, lymphocyte, monocyte, neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio, and monocyte-to-lymphocyte ratio, albumin, D-dimer, blood urea nitrogen (BUN)/albumin, C-reactive protein (CRP) have been proposed as indicators of systemic inflammation and infection. However, only few studies have focused on the prognostic value of blood parameters for CAP.

Methods: A total of 80 subjects were selected. A detailed history was taken followed by physical examination. Chest X-ray, routine blood investigations were done. Severity of CAP was assessed using CURB-65 score. All the blood parameters were followed up till the patients stay in hospital and then the prognostic values of these blood parameters were assessed.

Results: All 80 patients are followed up and the results are as follows: NLR with a cut-off value of more than 10 was shown to predict mortality. Increased NLR carried poor prognosis which correlated with high CURB-65 score and ICU admission. The median value of albumin was 3.1 g/dL. As levels of serum albumin decrease, the risk of complications significantly increases ($p < 0.001$). BUN/Albumin ratio is positively related with 30-day mortality when BUN/albumin ratio is < 0.753 . CRP was independently associated with 28-day mortality ($p < 0.05$). NCP (neutrophil count percentage) values higher than 85% in the early-stage blood test were associated with a higher risk of mortality.

Conclusion: From this study, we found that higher NLR, low levels of albumin, BUN/albumin ratio $<$ high CRP, high NCP are associated with higher risk of mortality in patients suffering from CAP.

Keywords: Community-acquired pneumonia, blood parameters, albumin, NLR, NCP, CRP, BUN/albumin

OP-No.: 10

Small Airways Involvement in Severe Asthma: How Common and its Implications?

Authors – Dr Dhruv Talwar, Dr Sourabh Pahuja, Dr Deepak Prajapat, Dr Kanishka Kumar, Dr Deepak Talwar

Background: Conventionally asthma is large airway disease but small airways involvement has been reported. This study aims to evaluate small airway disease in severe asthma patients using impulse oscillometry (IOS).

Methods: Clinical records of 94 consultive severe asthma patients from severe asthma clinic between 2017 to 2019 were retrospectively analyzed. Clinical data, asthma control, spirometry, lung volumes, diffusion capacity and IOS parameters were compared between patients grouped into large (LAO) small (SAO) or no (N) airway obstruction on the basis of predefined cut offs of R5, R20, R5-20, Ax and Fres and statically analyzed.

Results: Among total of 94 GINA defined severe asthmatics patients, only small airways were involved in 27.3%. But small airway parameters were high even in patients with large airway obstruction on IOS parameter; and normal IOS parameters was reported in only 19.2% severe asthmatics. Severe asthma was more common in females with mean age being 53.8 ± 14 years. Age of onset of asthma being > 30 years indicated adult onset asthmatics in our study cohort. There was no significant difference between baseline serum IgE, absolute eosinophil count (AEC) and BMI between the IOS groups of small, large or no airway obstruction, However, asthma control test (ACT) scores were lowest in SAO, 16.2 vs. 17.5 in LAO and highest in normal IOS groups (18.5), indicating poor control in both types of obstruction ($p < 0.05$). All IOS indices R5, R20, R5-20, D5-20, Ax and Fres were statistically different among 3 IOS groups. Among the spirometry parameters FEF 75 and RV % predicted correlated significantly with IOS parameters.

Conclusions: Significant small airway involvement is seen in nearly 80% of severe asthmatics and is associated with worst asthma control. Targeted therapies for these patients is urgently needed for optimal control of the disease and better quality of life.

Keywords: Asthma, impulse oscillometry, airway disease, spirometry

OP-No.: 11

Efficacy of Inhaled Corticosteroids on Pulmonary Function, Quality of Life and Frequency of Exacerbation in Patients with Bronchiectasis without Airway Hyperresponsiveness: A Pilot Study

Author – Dr Safia Ahmed

Background and Objectives: Effect of inhaled corticosteroid in stable cases of bronchiectasis without hyperresponsiveness has not been studied.

Methods: It was a pilot study with an open-label randomized control design conducted in a tertiary care chest hospital, with 40 patients in each arm. Bronchiectasis was diagnosed by high-resolution computed tomography (HRCT) chest. Patients with bronchial hyperresponsiveness (BHR) were excluded by performing indirect bronchoprovocation test using inhaled AMP (adenosine monophosphate). Eighty patients meeting the inclusion criteria were randomized into IG (intervention group) receiving 500 µg fluticasone propionate twice a day and CG (control group) receiving standard care without inhaled corticosteroids. Both groups were assessed monthly till 6 months. Clinical data (mainly FEV1, number of exacerbations, health-related quality of life (HRQoL) by SGRQ (St. George's Respiratory Questionnaire) was collected at baseline and end of 6 months.

Results: Eighty (IG-40, CG-40) patients of stable state noncystic fibrosis bronchiectasis completed the study. Mean age [IG 49.7 (17.6) vs. CG 49.9 (16.6)], Males IG [62.5% vs. CG 60%], most common etiology was tuberculosis [IG -16/40 (40%) CG 15/40 (37.5%)], Difference in SGRQ score (baseline-end of treatment)[IG 5.47 vs. CG 1.65, p = 0.00], Difference in FEV1 [IG -0.054 L vs. CG -0.004 L], mean no. of exacerbations at end of treatment [IG 1 (0.9) vs. CG 1.2 (1.1)].

Conclusion: Patients with stable bronchiectasis without bronchial hyperresponsiveness, treated with inhaled fluticasone 500 µg twice daily for 6 months showed a clinically significant improvement in HRQoL. No statistically significant difference seen in pulmonary function and frequency of exacerbations.

Keywords: Bronchiectasis, inhaled corticosteroids, health-related quality of life

OP-No.: 12

Pulmonary Complications in Patients Hospitalized with Dengue Fever: A Cohort Study of 40 Individuals

Authors – Dr Neelesh Guttikonda, Dr K Madhuri, Dr T Pritham, Dr N Gopichand

Background and Objectives: Dengue fever, a mosquito-borne viral infection, can lead to severe disease manifestations, including pulmonary complications. However, there is limited research exploring the prevalence and distribution of pulmonary manifestations in dengue patients. This cohort study aimed to investigate the frequency of pulmonary complications, such as pleural effusion, pneumonia, and acute respiratory distress syndrome (ARDS), in a group of 40 individuals diagnosed with dengue fever.

Methods: A prospective cohort of 40 individuals diagnosed with dengue were enrolled and closely monitored during their hospital stay. Among them, 10 had a nonsevere form of dengue, while 30 presented with severe dengue fever. Thorough clinical assessments, radiological investigations, and laboratory tests were conducted to identify pulmonary complications in the study group.

Results: Among the 40 dengue patients, 30 had severe dengue fever, unilateral pleural effusion was observed in 8 (20%) patients, bilateral pleural effusion in 5 (12.5%) cases, indicating a significant risk of pleural effusion in severe dengue fever cases. ARDS was observed in 9 (22.5%) patients. Bilateral pneumonia was present in 5 (12.5%) individuals, while the rest 3 (7.5%) developed unilateral pneumonia.

Conclusion: This cohort study provides valuable insights into the prevalence and distribution of pulmonary complications in dengue fever patients. The findings highlight the importance of recognizing and monitoring pulmonary manifestations, such as pleural effusion, ARDS and pneumonia, as they significantly impact patient outcomes and treatment strategies. Early recognition and intervention are crucial to optimize patient care and reduce morbidity and mortality associated with severe dengue cases.

Keywords: Dengue fever, pulmonary complications, acute respiratory distress syndrome, pleural effusion, pneumonia, cohort study

OP-No.: 13

Correlation Between High-Resolution Computed Tomography Findings and Biomarkers among COVID-19 Patients and their Progression to Lung Fibrosis

Authors – Dr Moniish V, Dr Jereen V, Dr Satish, Dr Nithin Thomas, Dr Arthi

Background: Coronavirus disease 2019 (COVID-19), is one of the most contagious viral infections of this century which is caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). It has been the reason for more than 6 million deaths causing a disastrous effect on the world's demography. SARS-CoV-2 has raised to be the most significant global health crisis since the influenza pandemic, which happened in 1918.

Objectives: To study the high-resolution computed tomography (HRCT) manifestations of COVID-19 patients on initial and follow-up CT and their progression to lung fibrosis. To correlate between the biomarker values of COVID-19 patients and the development of lung fibrosis.

Methods: Detailed data including demography, comorbidities, smoking and alcohol status of patients who were above 18 years of age and COVID-19 reverse transcriptase-polymerase chain reaction (RT-PCR) positive who underwent investigations like serum C-reactive protein (CRP), interleukin (IL-6), and HRCT chest were collected. CT severity scores are assigned out of 25 based on the percentage area involved in each of the 5 lobes initially and also with follow HRCT chest during the study period. The interval between the initial HRCT chest and follow-up HRCT chest was 3 months.

Results: Out of 83 patients, 20 patients showed fibrosis in their follow-up HRCT with predominantly seen in female patients and in the age group >60 years. Fourteen patients who developed fibrosis did not have smoking and alcohol history. Twelve patients with CRP levels >50 mg/dL developed fibrosis. Thirteen patients with IL-6 level >50 pg/mL developed fibrosis. Patients receiving injection remdesivir did not develop fibrosis.

Conclusion: This correlation was done to find the predictors of pulmonary fibrosis and protectors of pulmonary fibrosis. According to our study, injection remdesivir administration and patients with history of smoking and alcohol have decreased development of fibrosis. This study shows that serum CRP and IL-6 can be used as biomarkers to predict pulmonary fibrosis.

Keywords: COVID-19, HRCT chest, injection remdesivir, IL-6, CRP

OP-No.: 14

Utility of COPD Assessment Test Score and 6-Minute Walk Test in Stable COPD Patients to Assess Severity and its Correlation with Spirometric Values

Author – Dr Vasavi Sri Dattasena Rudraraju

Background and Objectives: Chronic obstructive pulmonary disease (COPD) is a major global health concern. Spirometry is a widely used diagnostic tool for evaluating the severity of COPD. Unfortunately, access to spirometry is not always available in remote medical facilities. In such situations, simpler alternatives such as 6-minute walk test (6MWT) and COPD assessment test (CAT) score can be beneficial for assessing the severity of COPD. Thus, this study aimed to assess the correlation between spirometry and CAT scores and 6-minute walk distance (6MWD), so that they can be utilized in resource-constrained settings.

Methods: A prospective observational study was carried out in 75 stable COPD patients. Disease severity was assessed by pre- and post-bronchodilator spirometry tests. Then 6MWT was performed according to the American Thoracic Society (ATS) protocol and distance was measured in meters. This was followed by filling of the CAT questionnaire and score was calculated. We statistically compared the relationship between CAT score, 6MWD and spirometry values.

Results: Most of the patients were >60 years with >70% males. Smoking was the important predisposing factor for the development of COPD in males and biomass fuel exposure in females. The correlation was assessed using Pearson's correlation. The significance of variation in 6MWD, CAT score with COPD severity was determined using one-way analysis of variance (ANOVA). The mean CAT scores for mild, moderate, and severe disease was 10.25 ± 2.63 , 16.23 ± 4.59 , 23.33 ± 3.79 , which were statistically significant ($p < 0.05$). 6MWT in mild, moderate, severe disease was 422.50 ± 12.58 , 353.08 ± 37.94 , 250.00 ± 20.00 , which were statistically significant ($p < 0.001$). The 6MWD showed a significant positive correlation with FEV1% ($r = 0.949$, $p = 0.001$). There was a negative correlation between the CAT score and FEV1% ($r = -0.798$, $p < 0.05$).

Conclusion: CAT score and 6MWT can be utilized to assess COPD severity, especially in resource-limited settings.

Keywords: Chronic obstructive pulmonary disease, CAT score, 6MWT

OP-No.: 15

A Pilot Study on a Novel Method of Draining Malignant Pleural Effusion with an Indwelling Pleural Catheter

Authors– Dr Shrinath V, Dr Vikas Marwah, Dr IM Pandey, Dr Ajai Tentu, Dr Manu Chopra, Dr Rahul Tyagi, Dr Kislay Kishore, Dr Aseem Yadhav

Background and Objectives: There are two drainage methods with indwelling pleural catheter (IPC): aggressive drainage and symptom-guided drainage. There is no consensus on which drainage technique is superior with both having advantages and disadvantages. We have devised a novel drainage technique that aims to combine the advantages of both the established techniques. The objective was to evaluate if the novel method of drainage could bring about relief in breathlessness, improve autopleurodesis and decrease use of vacuum bottles.

Methods: *Inclusion criteria* – Patients with malignant pleural effusion having symptomatic improvement after a large volume thoracentesis, rapid re-accumulation, high-risk as per LENT score, trapped lung. *Exclusion criteria* – non-consenting patients, patients with poor family/social support, unable to understand and perform home drainage.

Method: One week of high-intensity drainage followed by symptom-guided drainage. Breathlessness was assessed using a visual analog scale (VAS), number of vacuum bottles used, and spontaneous pleurodesis attained was noted.

Results: Twenty-five patients were included in the study. Mean breathlessness on presentation was 87 as per VAS, which decreased to 48.2 after initial drainage. IPC drainage was successful in maintaining a sustained decrease in breathlessness. Only 1 patient required readmission and 13 (52%) attained autopleurodesis with our drainage method. Out of 13 patients, who attained pleurodesis 10 didn't have the need to use vacuum bottles for home drainage.

Conclusion: Our novel method of drainage using an IPC was able to achieve a higher rate of autopleurodesis than the established 25% rate. Patient also consumed significantly less vacuum bottles thus reducing the recurrent cause.

Keywords: Indwelling pleural catheter, malignant pleural effusion, novel drainage technique

OP-No.: 16

Clinical and Radiological Profile of Patients with Connective Tissue Disease Related Interstitial Lung Disease

Author– Dr Farjana Begum

Background: Connective tissue diseases (CTDs) are heterogeneous spectrum of systemic rheumatologic conditions, characterized by systemic organ manifestations and autoimmune manifestations. CTDs affecting the lung include rheumatoid arthritis (RA), systemic sclerosis (SSc), Sjögren's syndrome (SjS), idiopathic inflammatory myopathies (IIM), systemic lupus erythematosus (SLE), and mixed CTD (MCTD). Most pulmonary complications appear in an established case of collagen vascular disease, but sometimes lung disease may precede systemic manifestations. Diagnosing CTD-related ILD (CTD-ILD) is complex, with a growing emphasis on multidisciplinary teams including pulmonologists, pathologists, radiologists, and rheumatologists to reach a consensus diagnosis. This study is to analyse the clinical and radiological profile in cases of CTD-ILD.

Methods: Seventy-one patients with predominant symptoms of progressively increasing dyspnea, dry cough, joint pain were worked up as per predesigned and pretested proforma to confirm and classify CTD-ILD. Immunological tests were done primarily for the diagnosis of CTD-ILD. High-resolution CT scans of chest and spirometry were done in all cases.

Results: Out of the 71 cases, majority were females (78.87%). Most common presenting complaint was exertional dyspnea (90.14%) followed by dry cough in 63.33%. Pallor was the most common general examination finding (77.46% cases), clubbing was seen in 36.61% cases. Crepitations were heard in 94.36% cases. RA was the most commonly observed CTD (33.80%), followed by SSc (25.35%), MCTD (18.30%), overlap syndrome (15.49%), SLE (4.22%), dermatomyositis/polymyositis (1.4%), and SjS (1.4%). On HRCT thorax, UIP pattern 30 (42.25%) was most common, followed by NSIP 30 (42.25%) cases. OP was seen in 10 (14.08%), and LIP in. In RA, UIP was the most common pattern. NSIP was most commonly associated with SSc and MCTD. LIP was associated with Sjögren syndrome.

Conclusion: Proper clinical, radiological and serological evaluation is needed in the diagnosis and management of CTD-ILD

Keywords: Connective Tissue Disease, Interstitial Lung Disease, Radiological, Spirometry

OP-No.: 17

A Study of Serum to Pleural Fluid Albumin Gradient in Differentiation of Exudative and Transudative Pleural Effusion in Comparison to Light's Criteria

Author– Dr Sara Ahmed

Background and Objectives: Pleural fluid accumulation occurs when the pathological processes cause an imbalance of hydrostatic pressure gradient, capillary membrane permeability, and lymphatic capacity resulting in protein poor transudates or inflammatory exudates. Pleural effusion is one of the major causes of morbidity and mortality. Serum to effusion albumin gradient (SEAG), and Light's criteria are used to differentiate exudative from transudative effusions. The main objective of the study is to determine the efficacy of serum to pleural fluid albumin gradient as a marker to differentiate transudate from exudate and to compare it with Light's criteria.

Methods: A total of 50 patients presenting with pleural effusion were taken up for the study. A detailed examination was done and patients were counseled for diagnostic thoracentesis. Blood samples along with the pleural fluid samples were sent for further analysis.

Results: According to the SEAG ratio, the number of patients with exudates were 36 (72%) and those with transudate were 14 (28%). According to the Light's criteria, 42 (84%) were exudates and transudates were 8 (16%). The pleural protein to serum protein ratio recorded in the study is 0.306-4.6 while the mean ratio was 0.883 ± 0.5995 . Observed values are 0.91 ± 0.2 IU/L in exudates and 0.797 ± 1.26 IU/L in transudates. The differences in the means were strongly significant ($p = 0.000$).

Conclusion: It was found that SEAG is more sensitive than the Light's criteria for classifying transudates and is superior as it is based on calculation of gradient rather than absolute values or ratios.

Keywords: Serum to effusion albumin gradient, Light's criteria, pleural effusion, transudate/exudate, thoracentesis

OP-No.: 18

Outcomes of Bedaquiline and Delamanid-containing Regimens among Pre-XDR and XDR Pulmonary Tuberculosis Patients in Nodal DRTB Center of Odisha

Authors– Dr Joseph J Pulikotttil, Dr MR Dash, Dr Jyoti Patnaik, Dr Bibek Prasad Acharya

Introduction: Tuberculosis (TB) is the leading cause of death from single infectious agent ranking above HIV/AIDS, drug resistance TB strains are more difficult to treat than susceptible ones. The increase in drug resistant TB threatens the global progress towards End TB strategy of WHO.

Aims and Objectives: To measure the clinical, microbiological, and radiological outcome, of bedaquiline or delamanid-containing regimen in patients with pre-XDR (extensively drug-resistant) and extensively drug-resistant tuberculosis (XDR-TB).

Methods: All consenting patients registered as multidrug-resistant TB (MDR-TB) who are on bedaquiline or Delamanid containing regimen between April 2020 to July 2021 were included in the study. All the patients were counseled and managed in the indoor for a initial mandatory period of 2 weeks.

Results: In the study, 30 patients were taken with including 76% males and 24% females. Seventy percent had pre-XDR PTB, 26.6% have MDR-PTB, and 3.3% XDR PTB. As 4 patients died by 6 months, 26 patients (86.6%) achieved smear and culture conversion at the end of 6 months and no patient had smear or culture reversion within 12 months.

Conclusion: Use of bedaquiline or delamanid combined with other active drug has potential to achieve a high culture conversion rates and well tolerate among MDR and XDR-TB patients. New drugs should not be kept as a last resort, on the contrary they should be introduced as soon as possible to improve treatment outcome.

Keywords: Multidrug-resistant TB, pre-XDR-TB, XDR-TB, bedaquiline, delamanid

OP-No.: 19

Why Do MDR-TB Patients in India Still Choose to Go Private? Perceptions and Knowledge of a MDR Cohort Visiting a Private Clinic

Authors– Dr Zara Akhtar Ansari, Dr Jigneshkumar Patel, Dr Reema Raviraj, Dr Robert Adam, Dr Zarir F Udwadia

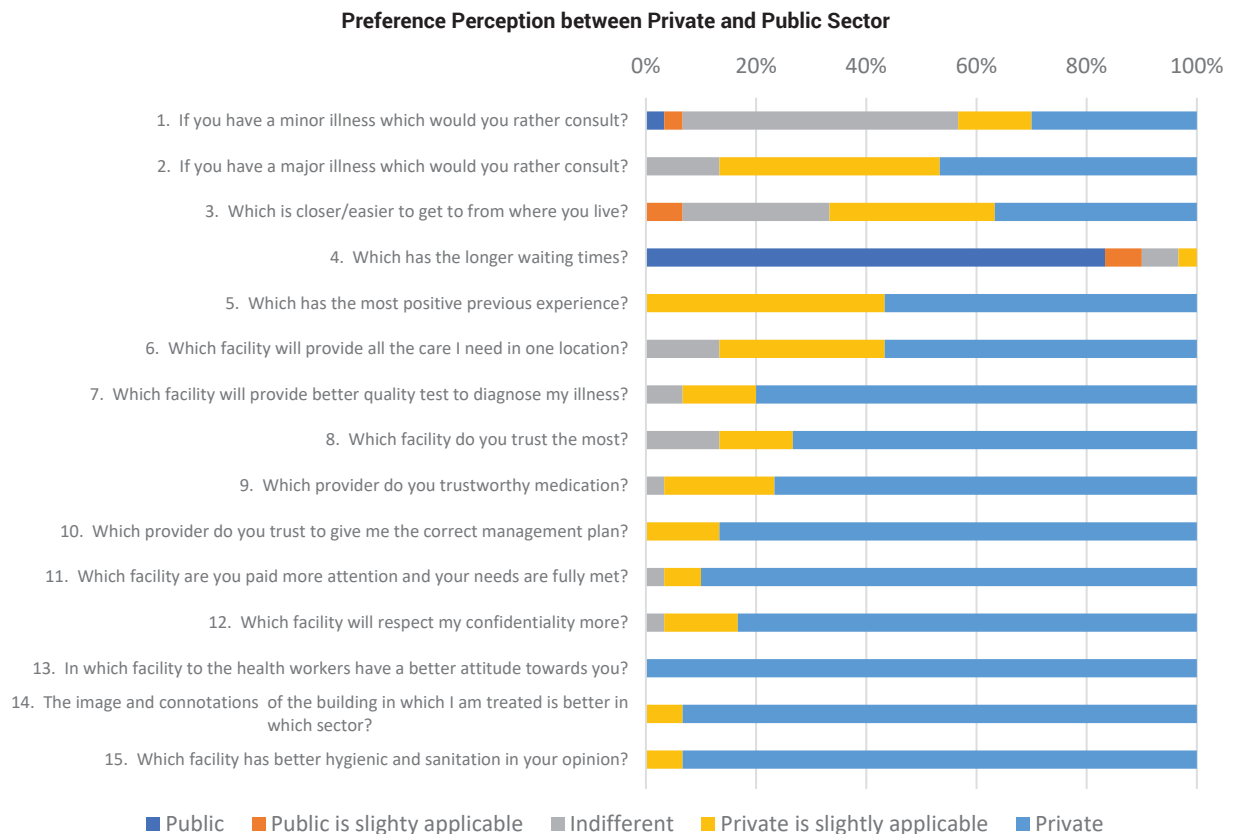
Background and Rationale: This study aimed to understand why multidrug-resistant tuberculosis (MDR-TB) patients in India choose to seek expensive private care instead of free public health care. We also explored patient’s knowledge, perception, health-seeking behavior, psychological health, and financial aspects related to MDR-TB treatment.

Methods: A structured interview was administered to MDR-TB patients at PD Hinduja Hospital in Mumbai, India. The questionnaire covered demographics, MDR-TB knowledge, perceptions of private and public health care and health-seeking behavior. Each interview was conducted by medical doctor at our TB clinic, lasted approximately 1 hour.

Results: The study comprised 30 MDR-TB patients, 19 (63.3%) females and 11 (36.7%) males. Majority were employed young adults, with 24 (80%) having completed at least secondary education. Seventeen (56.7%) were able to even state the full form of the abbreviation MDR-TB. However, 21 (70%) understood that MDR-TB required additional medications and longer treatment. Only 8 (26.7%) were aware of the DOTS Programme. Twenty-two (73.30%) stated their inability to afford private health care treatment but still expressed a desire to continue with it. When asked about the reasons for preference of private health care, 25 (83.3%) mentioned that they had previously consulted public hospitals but were dissatisfied and therefore sought treatment in private sector. When asked about the disadvantages of public health care, 24 (80%) stated poor time management and long queues as major issues. The main reasons for choosing private health care included care that was perceived to be ‘superior quality’, reputable doctors, proper guidance and faster service. Although 13 (43.3%) acknowledged free public treatment benefits, but others didn’t deem it a deterrent.

Conclusion: This study sheds light on factors influencing MDR-TB patient’s preference for private health care in India. The findings revealed limited knowledge about MDR-TB and the benefits of the public sector among participants. These results underscore the importance of enhancing patient education, effective communication, and better management practices within the public sector to improve patient satisfaction and adherence to treatment.

Keywords: MDR-TB, perceptions, private health care, public health care



OP-No.: 20

Safety and Early Efficacy Results from the Prophylactic Pirfenidone for Prevention of Radiation Induced Pneumonitis in Patients with Lung Cancer (PROPER) Study

Author– Naveen Mummudi

Background: A significant proportion of patients undergoing radical radiation therapy (RT) for lung cancer develop clinico-radiological features of radiation pneumonitis (RP), which can compromise their survival outcomes. We conducted an open-label, single arm, phase II study to evaluate the efficacy of Pirfenidone (PFD), a synthetic pyridone compound in the prevention of radiation induced fibrosis.

Materials and Methods: Patients with lung cancer who were candidates for RT with or without chemotherapy were administered PFD orally 1 week before starting RT at a starting dose of 600 mg/day and increased to 1200 mg/day, if tolerating well. PFD was given for the entire duration of RT and continued for 10 weeks after RT completion. Pulmonary function tests (PFTs) was performed at baseline and repeated at first follow-up and then every 6 months. Patients were imaged at baseline and at follow-up with PET CT/CT scans as per routine institutional imaging protocol. Primary endpoints were change in PFT at 3- and 6-months post radiation compared to pre-RT values.

Results: Between November 2021 and March 2023, 48 eligible patients were accrued in the study and 42 were evaluable. Non-small cell lung cancer (NSCLC) was the commonest histology (Adenocarcinoma and squamous carcinoma 45% each); 90% patient had stage IIIB/c disease. The absolute change in FEV1, FVC, FEV1/FVC ratio and DLCOsb values at 3-month from baseline were 0.09L, -0.01L, -3.5% and 1.19L respectively. When compared with a similar prospective cohort of 45 patients who did not receive PFD, we observed statistically significant improvement in absolute values of FEV1 ($p = 0.019$) and FEV1/FVC ratio ($p = 0.015$) and trend towards significance in % change of FVC ($p = 0.07$). Compliance to PFD was high with no drug-related acute side effects noted.

Conclusions: PFD is a well-tolerated drug with a potential to reduce radiation induced pneumonitis. Longer follow up will establish the efficacy of the drug in preventing worsening of PFT and radiological evidence of pneumonitis.

Keywords: Lung cancer, pirfenidone, radiation pneumonitis, radiation therapy

OP-No.: 21

Echoes of Respiration: Investigating Reactance and Forced Vital Capacity in Interstitial Lung Diseases Patients

Authors– Dr Riba, Dr Kiran

Background and Objectives: In recent years, the Forced Oscillation Technique (FOT) has gained prominence as a non-invasive pulmonary function test. Unlike spirometry, which often requires complex patient cooperation and active participation, the FOT offers a simpler alternative that is well suited for subjects who may find spirometry challenging to perform. By investigating the link between reactance and FVC, this study seeks to contribute to the growing body of knowledge regarding the comparative efficacy and ease of implementation of FOT as a complementary or alternative method to spirometry.

Methods: Cross sectional study. In 20 patients with ILD, pulmonary function tests by Impulse oscillometry and spirometry were performed. Respiratory reactance was assessed as whole breath and within breath (expiratory-inspiratory change, $\Delta X5$), along with FVC. A structured questionnaire was administered which included a series of inquiries designed to gauge subjects comfort level and overall experience with both procedures.

Results: Majority patients belonged to autoimmune ILD and were females. Mean X5 was low denoting a restrictive pattern. Most of them had severe restriction in spirometry. Within breath changes in X5 showed more negative inspiratory X5. There was a negative correlation between $\Delta X5$ and vital capacity. Presence of small airway disease, as characterized by increase in mean R5-R20 was shown to reduce $\Delta X5$. The participants had a favorable inclination towards FOT based on responses collected.

Conclusion: IOS was easier to perform. The exaggerated inspiratory reactance in ILD may reflect reduced distensibility of the lung during inspiration. The within breath change in reactance in ILD may be associated with its severity and physiological abnormality.

Keywords: Forced oscillometry, reactance, FVC, within breath change

OP-No.: 22

Fluorescein Diacetate Staining in Drug Resistant Pulmonary Tuberculosis Patients on Longer Treatment Regimen

Author – Dr Aswathy SA

Background: Finding failures of longer tuberculosis (TB) treatment regimen can be challenging, especially in this drug resistant tuberculosis era – as it requires more sophisticated technology and time. The present study is aimed to investigate the effectiveness of fluorescein diacetate (FDA) staining compared to culture in preventing delayed TB diagnosis.

Objective: To study the effectiveness of fluorescein diacetate vital staining in comparison to culture during the first 6 months' follow-up, post-treatment, among multi-drug resistant(MDR) pulmonary tuberculosis(PTB) patients on longer treatment regimen.

Methods: A prospective observational study was conducted, including 116 diagnosed cases of DR PTB patients attending at RBIPMT Hospital, from December 2020 to December 2021. After the primary analyses, the patients were followed up at the end of the first six months therapy. All participants were asked to provide two sputum samples for examination by both, culture and FDA staining at the Intermediate Reference Laboratory, Delhi.

Results: The follow-up data suggested that the relationship between the culture and FDA staining results was significant. After the end of the 2nd month, the diagnostic accuracy of FDA was almost 100%. Meanwhile, the FDA staining showed an overall sensitivity of 79.25%, a specificity of 98.87%, and a diagnostic accuracy of 97.08%.

Conclusions: FDA staining was as effective as liquid culture in the follow up of drug resistant pulmonary tuberculosis patients on longer treatment regimen. These diagnostic tests help reduce the delay in identification of the treatment outcomes and the burden of DRTB.

Keywords: Fluorescein diacetate staining, drug resistant tuberculosis, culture, longer treatment regimen

OP-No.: 23

Chronic Obstructive Pulmonary Disease and Under Nutrition in Developing Countries

Authors – Dr Harsha, Prof Dr Shashibhushan BL

Background and Objectives: COPD is chronic inflammatory disorder of lung and whole body mainly caused by tobacco smoking. Patient with COPD are in state of under nutrition, mainstay of treatment of COPD is pharmacotherapy and non pharmacotherapeutic approach such as respiratory rehabilitation and nutrition counseling.

Methods: 106 COPD patients admitted in Wards and RICU under Pulmonary Medicine department in Victoria Hospital from the month of July 2022 to July 2023. Pathogens were identified. All patients daily dietary intake was documented and their staging of COPD was done using spirometry. High calorie diet (20% energy from protein, 60% from carbohydrates and 20% from fats) was advised to all these patients.

Results: High calorie nutrition therapy using dietary supplements to COPD patients. It is seen after 8 weeks patient who were receiving high calorie diet showed increased body weight and muscle strength with improvement of airflow limitations.

Conclusion: Diet as modifiable risk factor, appears more as an option to prevent and modify the course of chronic obstructive pulmonary disease. Pulmonary cachexia due to systemic inflammation, oxidative stress with muscle wasting and muscle dysfunction. The important causes of under nutrition in these patients include decreased dietary intake and increased energy expenditure attempts are made to encourage the intake of high calorie food stuff, fruits and vegetables and nutrients such as vitamin, amino acids and unsaturated fatty acids.

Keywords: COPD, BMI, high calorie diet

OP-No.: 24

Randomized Control Trial on Home-based Rehabilitation in Interstitial Lung Disease

Author – Dr Rishbah Kochar

Background: Most studies on rehabilitation in ILD patients have been done in fairly homogeneous groups of patients in controlled, hospital-based settings. We did an RCT on efficacy of home-based PR in heterogeneous ILD group.

Aims and Objectives: To assess the impact of home-based PR program on outcome in ILD patients (irrespective of ILD type and severity).

Method: ILD patients visiting OPD were randomized to guided rehabilitation versus standard care for 12 weeks. Baseline assessment was done for quality of life, anxiety, depression in all patients. Rehabilitation group was given standardized, uniform exercise protocol, which was modified by FITT principle to each patient's capacity. Follow up was weekly by telephone and physically at 3, 6 and 12 weeks to assess tolerance and change protocol. All were given education, psychiatric assessment and support irrespective of randomized group

Outcomes: Change in exercise capacity (6MWD), dyspnea, QoL, depression and anxiety score.

Results: 57 patients (M = 27, F = 30) were randomized to control (n = 27) and intervention (n = 30) arms. ILD type was HP (17), NSIP (13), UIP (11), OP (8), Sarcoid (3), others (5). 17 patients dropout from study intervention (n = 12) and control (n = 5). Final analysis included 18 in intervention group and 22 controls. In those two completed 12 wk follow-up Intervention group had more improvement in 6MWD (by +7.3 m compared to controls), FVC (+80 mL) and depression score PHQ9 (-1.0) but control group had more improvement quality of life- KBILD (+2.3) and anxiety domains-GAD7 (-1.6). Though none of changes were statistically significant. Patient with worse FVC, 6MWD and exercise desaturation were more likely to dropout.

Keywords: Pulmonary rehabilitation, interstitial lung disease, quality of life, exercise capacity, anxiety and depression

OP-No.: 35

To Study the Clinical Course, Predictors, and Outcomes in Severe COVID-19 Patients

Authors – Dr Anantha Lakshmi T, Dr J Raghu, Dr S Swathi Reddy, Dr M Srikanth Goud

Rationale: Severe coronavirus disease 2019 (COVID-19) is associated with high morbidity and mortality. Analysis of the clinical spectrum, disease progression markers, and risk factors leading to adverse outcomes is required to understand the disease in depth.

Objectives: This study aimed to determine the risk factors associated with the increased mortality rate in severe COVID-19 patients. The study analyzed the clinical spectrum and various laboratory parameters of the surviving and deceased patients severe COVID-19.

Methods: This is a single-center, prospective study conducted in KIMS-Sunshine Hospitals from January 2021 to January 2022. A convenient sampling technique was used, and we included all consecutive adult patients (≥ 18 years of age) with laboratory-confirmed COVID-19, who were admitted to the ICU. We followed the patients up to 28 days after their ICU admission. Patients demographic characteristics, laboratory variables, treatment strategies, and outcomes were analyzed.

Results: A total of 134 patients were included, with a mean age of 52.81 ± 13.0 years, and the majority of belonged to the age group 45-60 years (42.5%). Hypertension was the most common (49.3%) comorbidity followed by diabetes (42.6%), cardiac disease, and cerebrovascular accident (CVA). The mortality rate in our study was 56% – at 28 days of follow-up. In this study, the highest mortality rate of 78.95% was observed in the age group >60 years ($p < 0.001$). While the non-survivors had high levels of C-reactive protein (CRP) (212.76 ± 110.16 vs 117.66 ± 94.46 $p < 0.001$), high D-dimer levels (7245 ± 2871.22 vs 4620.75 ± 2907.9 , $p < 0.001$), high interleukin (IL)-6 (418.93 ± 598.77 vs 42.26 ± 47.24 , $p < 0.001$), high neutrophil-to-lymphocyte ratio (NLR) ($7.28 \pm$ vs 6.24 , 4.94 ± 2.94 $p < 0.001$) compared to the survivors.

Conclusions: The findings depicted a mortality rate of 56% at the 28-day follow-up. Advanced age, raised inflammatory markers - CRP, D-dimer, IL-6, ferritin, and high NLR were found to be significantly associated with the high risk of mortality.

Keywords: COVID-19, outcome, predictors

OP-No.: 36

Role of Medical Thoracoscopy in Undiagnosed Pleural Effusions – An Observational Study

Authors – Dr Pradeep Naik. G, Dr Akshata JS, Dr Raghu BP, Dr Swapna R, Dr Anushree Chakraborty, Dr Swathi Karanth MP, Dr Deepak UG, Dr Yunus Ahmed Sheriff, Dr Aravindh Ram VR

Background and Objectives: Medical thoracoscopy (MT) is a minimally invasive procedure for diagnostic and therapeutic procedure employed by pulmonologists to evaluate and treat pleural diseases. Though cyto-biochemical and microbiological investigations provide an etiological diagnosis in approximately 75% of patients, in few pleural effusions the underlying cause often remains elusive prompting the use of MT for diagnosis and treatment.

Methods: A retrospective observational study was conducted from March 2022 to June 2023. Inclusion criteria encompassed all pleural effusion subjects with inconclusive pleural fluid analysis reports & radiological reports. Such patients were subjected to MT. Findings of MT were recorded and HPE (histopathological examination) were retrieved and recorded.

Results: The study comprised of 30 patients, with 24 (80%) males, 6 (20%) females with a mean age of 56 years. Thoracocentesis was suggestive of exudative lymphocytic predominant with low ADA level in all cases. On performing MT we observed adhesions in 26 (87%), nodules in 11 (37%), and growth in 1 (3%). HPE of MT-guided biopsy confirmed malignancy in 10 cases, tuberculosis in 14 and rest 6 had chronic inflammation. Most commonly observed MT finding in malignancy was nodules (7:70%) followed by adhesions with thickened pleura (5:50%) and growth (1:10%). In tuberculosis, most common MT finding was adhesions (10:71%) followed by nodules (4:29%). Those with chronic inflammation had adhesions (4:67%) and normal pleura (2:33%).

Conclusion: MT yielded a confirmed diagnosis in 80% of undiagnosed exudative pleural effusion subjects. Pleural nodules were the most common finding in those proved as malignancy while adhesions were common in those with tubercular etiology. These observations in undiagnosed pleural effusions underscore the utility of MT in undiagnosed pleural effusions.

Keywords: Medical thoracoscopy, diagnostic yield, lung cancer, pleural effusion, pleuroscopy

OP-No.: 37

Correlation of BODE Index and Severity of Right Ventricular Dysfunction Assessed Using Echocardiography in Stable COPD Patients

Authors – Dr Sangavi S, Prof. Dr K Anbananthan, Dr A Ramasamy, Dr SA Natesh, Dr A Kirubanandam

Background and Objectives: COPD is not only characterized by chronic airflow limitation, but also a systemic disease. There is no information about alteration in right ventricle functions precipitated by systemic manifestation of COPD. We aimed to evaluate the relationship between the BODE index and RV function by means of TAPSE (Tricuspid annular plane systolic excursion) and MPI (Myocardial performance index).

Methods: This was a correlational study done on 60 COPD patients, who were outpatients and inpatients in Thanjavur Medical College, conducted between August 2022 to February 2023. All COPD patients were evaluated by spirometry, 6 minutes walk test, BMI, mMRC dyspnea scale and echocardiography. BODE Index is applied to all stable COPD patients, analyzed and compared to echocardiography to found out their association with development of cor pulmonale. SPSS 17.0 statistical software was used for statistical analysis. The Kolmogorov-Smirnov and Shapiro-Wilk test was used to test the normality of distribution.

Results: Among the 60 study population, 22 patients had RV dysfunction finding in echocardiography. Out of these 22 patients, 18 patients had increased BODE index (≥ 6). The analysis shows high positive correlation between BODE index and MPI & high negative correlation between BODE index and TAPSE.

Conclusion: The BODE index is an easily calculated multidimensional grading system for evaluating COPD patients in pulmonary clinics. It not only provides information about the pulmonary aspects of disease such as airflow limitation, it also evaluates the systemic clinical manifestations. Our study revealed that assessment of the BODE index provides information about RV functions. As the BODE index parameters increases, there is increase in RV dysfunction assessed using echocardiography.

Keywords: COPD, BODE index, TAPSE, MPI

OP-No.: 38

Pulmonary Function Test in Different Phenotypes of COPD: A Cross-Sectional Study

Authors – Dr Manimozhi, Prof Dr D Nancy Glory, Dr R Poonguzhali, Prof Dr V Vinod kumar

Background: Chronic obstructive pulmonary disease (COPD) is a complex, progressive respiratory condition characterized by heterogeneous clinical presentations (phenotypes). The aim of this study is to assess the prevalence of the predominant phenotype of chronic obstructive pulmonary disease and to correlate each phenotype with lung function profile.

Methods: An observational, cross-sectional study. Patients were categorized based on their history and claimed prevailing symptoms at recruitment: chronic cough (CB, suggesting chronic bronchitis); dyspnea (possible emphysema components, E); recurrent wheezing (presuming asthma components, A). Variables collected were; smoking habit; history of asthma; claim of >1 exacerbations in the previous year, the blood eosinophil count, spirometry, CT chest and DLCO % predicated. Comparative analysis of these investigations in these COPD patients recorded.

Results: The data was collected from a total of 120 study participants. The CB phenotype was prevalent (41.3%), followed by the E and the A phenotypes (36.8% and 21.4%), respectively. Lung function proved more preserved in the COPD-CB phenotype compared to other phenotypes. When dyspnea was the prevailing symptom, the probability of belonging to the COPD-E phenotype was 3.40 times higher than others. Lower DLCO values were highly probative for the COPD-E phenotype. COPD-A phenotype positively correlated with recurrent wheezing, plasma eosinophils, FEV1 reversibility and DLCO.

Conclusion: The recognition of the main phenotypes of COPD can be effectively pursued by means of a clinical and instrumental parameters and current daily practice it is easy to obtain. The phenotypical approach is crucial in the management of COPD as it allows to individualize the therapeutic strategy and to obtain more effective clinical outcomes.

Keywords: COPD phenotypes, clinical pictures, chronic bronchitis, emphysema, bronchial asthma

OP-No.: 39

Role of Therapeutic Drug Monitoring in Optimization of First-line Antituberculosis Drugs: A Systematic Review

Authors – Dr Shubhendu, DR PI Meshram, Dr RR Hegde, Dr VV Pujari, Dr SA Agale

Background: Therapeutic drug monitoring (TDM) is the clinical practice of measuring specific drugs at designated intervals to maintain a constant concentration in a patient's bloodstream, thereby optimizing individual dosage regimens. TDM is indicated in patients at risk of altered pharmacokinetics (e.g. HIV, diabetes mellitus, gastrointestinal abnormalities, drug-drug interactions, renal impairment) and/or worsened treatment prognosis (inadequate treatment response despite adherence). Despite such importance, implementation of TDM is low with lack of validating guidelines & high-level prospective studies.

Objective: Study of therapeutic drug levels of anti-TB drugs in drug sensitive tuberculosis patients showing poor clinical response and the factors associated with low drug levels.

Methods: Patients undergoing treatment for drug-sensitive TB and showing poor clinical response were identified by using routine TB surveillance. The standard procedure for TDM was the estimation of first-line antituberculosis drug concentrations in the morning while fasting and then at 2 hours after their daily dose of TB medications.

Results: In total, 20 patients were identified in whom TDM was performed, of whom 15 (75%) had at least one low drug concentration. Low drug levels were found in 9 of 15 (60%) isoniazid, 11 of 15 (73%) rifampicin and 4 of 9 (45%) pyrazinamide measurements, but in only 3 of 14 (21%) ethambutol measurements. Within cases only, the 11 out of 15 (74%) patients with low serum drug levels were having comorbid illnesses (HIV co-infection, diabetes mellitus, lower serum albumin levels or anemia), compared with the 2 of 5 (40%) cases in whom all drug levels were within therapeutic ranges.

Conclusion: TB drug levels were frequently below clinically acceptable levels in patients with active TB, showing poor clinical response; particularly in those with HIV infection or other comorbidities. TDM is potentially useful for the treatment of active TB, but is currently underused.

Keywords: Therapeutic drug monitoring, tuberculosis, drug-sensitive, pharmacokinetics, concentration, clinical response, estimation, optimization, prognosis, implementation, comorbidity

OP-No.: 40

Spectrum of Interstitial Lung Diseases in a Tertiary Care Center – A Cross-Sectional Study

Authors – Dr Sagar, Dr Akshata JS, Dr Raghu BP, Dr Swapna R, Dr Deepak UG, Dr Yunus, Dr Arvind Ram

Background and Objectives: Interstitial lung diseases (ILDs) are a heterogeneous group of disorders characterized by varying degrees of inflammation and fibrosis in the lung parenchyma. In a developing country like India, with a high prevalence of tuberculosis (TB), ILDs are often initially misdiagnosed as TB. We intend to find out the distribution of ILD subtypes in a tertiary care center and study the clinico-radiological profile of ILD patients.

Methods: This is a retrospective cross-sectional study conducted at in the Department of Pulmonary medicine, SDS TRC and RGICD. The medical records of all the patients who presented between January 2021 and March 2023 were reviewed and the data collected was analyzed for the demographics, clinical presentation and radiological findings. Relevant serological and radiological investigations were done and data analyzed using Fischer's exact test.

Results: The mean age of presentation was 56.78 years. Females comprised of 60% of the patients. In the pool of ILDs analyzed, Hypersensitivity Pneumonitis (HP) (26.7%) was found to be the most common subgroup, followed by CTD-ILDs (21.7%). Exertional dyspnea was found in 93.3% and cough in 86.67% of the patients with 30% having significant smoking history. The most common pattern on CXR was reticular/reticulonodular shadows (60%) and on HRCT, intralobular and interlobular interstitial thickening (78.3%). Spirometry showed restrictive pattern in 40% and mixed pattern in 20%. Twenty percent presented with significant walking desaturation. On 2D-echo 40% had pulmonary hypertension.

Conclusion: HP was the most common ILD followed by CTD-ILD in our center. This suggests that the distribution of ILD would vary depending on geographical area and environmental exposure.

Keywords: Interstitial lung diseases, clinico-radiological profile, hypersensitivity pneumonitis

OP-No.: 41

To Study Association Between DLCO, 6MWT and Pulmonary Hypertension in Patients of Idiopathic Pulmonary Fibrosis

Author – Dr Khusboo Bihani

Background and Objectives: Idiopathic pulmonary fibrosis (IPF) is a heterogeneous lung disorder that can be complicated by the development of pulmonary hypertension (PH). A reduced diffusion capacity (DLCO) has also been shown both to be associated with a worse prognosis in patients with coexistent IPF and PH. Submaximal stress test such as 6MWT is easier to perform than DLCO due to dyspnea in advanced lung disease. We have studied the correlation between DLCO, 6MWT and PH in patients with IPF.

Methods: On 75 patients with IPF, 6MWT was performed. Then, they were subjected to DLCO and parameters were assessed. Further, 2D Echo was done to assess the association between PH, DLCO and 6MWT.

Results: Out of 75 patients with IPF, 48 (64%) of them showed desaturation on 6MWT. Out of these 48 patients, 8 (16%) were unable to perform DLCO. Out of the rest 40 patients, 20 (50.8%) showed mild decrease in DLCO, 16 (40%) had moderate and 4 (10%) had severe decrease in DLCO. In 20 patients with mild decrease in DLCO, only 12 (60%) showed moderate-severe PH. In 16 patients with moderate decrease in DLCO, 8 (50%) had moderate and 6 (37.5%) had severe PH. All the patients who had severe decrease in DLCO had severe PH. In 27(36%) patients with no desaturation, 18 cases had mild decrease in DLCO, and only 9 had moderate decrease in DLCO. There were no case of severe decrease in DLCO.

Conclusion: 6MWT can be used as adjunct in IPF as prognostic tool as well as to identify lung function abnormalities wherever DLCO is not feasible. Severe reduction in DLCO levels has been shown to be associated with a higher grade of PH. Reduced DLCO and desaturation on 6MWT are strong predictors of PH in IPF.

Keywords: IPF, DLCO, 6MWT, PH, 2D Echo

OP-No.: 42

Peak Energy Analysis of Acoustic Cough to Identify Respiratory Diseases

Authors – Dr Sujith Thomas Chandy, Dr Balamugesh Thangakunam, Dr Gowrisree Rudraraju, Dr Narayana Rao Sripada, Dr Jayanthi Govindaraj

Background and Objectives: Cough is a common symptom of respiratory diseases and change in the cough sound can reflect a pathological condition in the lungs. Recent advancement on the analysis of the cough sound has proven that it can be used as a non-invasive marker for screening respiratory conditions, such as asthma, COPD, ILD, bronchiectasis and post covid sequelae. The energy envelope is distinguishable for normal subjects versus subjects with respiratory conditions. Peak analysis of the energy envelope helps in quantifying the feature variation for these conditions.

This study provides the variation of the peak energy features on the Root Mean Square Energy (RMSE) envelope of cough sounds. Peak properties of energy contours like peak height, peak prominence, base distance (distance between left base and right base of a peak) help in quantifying cough patterns.

Methods: Single center, observational study.

Results: The peak analysis in asthma shows higher base distance and peak height than that of normal because of prolonged expulsion and constriction of airways. The base distance is observed high in bronchiectasis but peak height and prominence are less when compared with asthma due to irreversible dilatation of the airways. Whereas in COPD the base distance and prominence are found to be less than normal, asthma and bronchiectasis which is attributed to multiple narrowing of the glottis. Additionally, the energy peak heights of the cough were observed to be very close due to conditions like excess mucus, airways inflammation, destruction of lung tissue in COPD.

Conclusion: Peak analysis of cough provides inferences which can be used as descriptors to differentiate coughs related to respiratory diseases. This study helps us to enhance the performance of machine learning models by including these peak related features. The analysis can also be further used in detecting other respiratory conditions.

Keywords: Cough sound, respiratory diseases, envelope, audio peak analysis, peak prominence

OP-No.: 43

Role of ESS and STOP-BANG Scores in Monitoring Response to CPAP Therapy in Patients of Sleep-related Breathing Disorders

Authors – Dr Tanushee Wason, Dr Medha Bargaje

Background and Objectives: Sleep-related breathing disorders (SRBDs) are highly prevalent and largely undiagnosed. ESS (Epworth Sleepiness Scale) & STOP-BANG scores are validated for screening. Polysomnography is the gold standard in diagnosis of obstructive sleep apnea (OSA). CPAP therapy is used for treating SRBDs. The primary objective was to assess effectiveness of CPAP therapy using ESS & STOP-BANG scores in OSA patients.

Methodology: A prospective observational study in a Western Indian tertiary care hospital from July 2022 to August 2023 included 34 SRBD patients (AHI ≥ 15) who were advised CPAP therapy. Baseline and follow-up ESS and STOPBANG scores were calculated, tabulated, and analyzed alongside AHI correlations. CPAP-accepting and non-accepting OSA patients were compared. Patients also received lifestyle modifications with associated comorbidity management.

Results: In this study, 34 SRBD cases (19 males, 15 females) participated. Among the 34 patients, 47% were pure OSA & 53% exhibited mixed apnea. Twenty patients opted for CPAP therapy. Baseline ESS: 14.56 ± 5.8 ; STOP-BANG: 5.56 ± 1.23 . ESS improved at 1 month (11.23 ± 4.9) and significantly ($p < 0.001$) at 3 months (ESS: 9.63 ± 4.9 , STOP-BANG: 4.06 ± 0.93), & 6 months (ESS: 7.92 ± 2.78 , STOP-BANG: 4.77 ± 4.64). Improvements were noticed in daytime sleepiness, tiredness, snoring and observed apneic events. Mean AHI showed weak, nonsignificant correlation with ESS & STOP-BANG: scores.

Conclusion: Consistently utilizing ESS and STOP-BANG scores aids in the management of SRBD patients undergoing CPAP therapy, avoiding repeated PSG. They provide cost-effective, non-invasive symptom monitoring for timely interventions and improved outcomes.

Keywords: ESS, STOP-BANG, CPAP, PSG

OP-No.: 44

Comparing High-flow Nasal Cannula with Non-invasive Ventilation for Managing Acute Exacerbation of Chronic Obstructive Pulmonary Disease: A Systematic Review and Meta-analysis

Authors – Dr Pugazhendi Inban, Dr Sai Harini Chandrasekaran

Background: Non-invasive positive pressure ventilation (NIV) effectively treats patients with hypercapnic respiratory failure caused by AECOPD, reducing mortality and intubation. HFNC is gaining popularity as a substitute for NIV in cases of hypercapnic respiratory failure, but its effectiveness in managing AECOPD remains unclear.

Objectives: Using a meta-analysis of the existing research, we have undertaken this systematic review to evaluate the effectiveness of HFNC against NIV during the treatment of AECOPD.

Methods: This systematic review included randomized controlled trials and cross-over trials of patients 18 and older with AECOPD and acute hypercapnic respiratory failure. Outcomes included mortality risk, endotracheal intubation, ICU or hospital length of stay, and changes in PaCO₂ or PH. Two researchers independently searched the EMBASE, Cochrane, and PubMed databases from inception to April 2023. The risk of bias assessment was evaluated using the modified Cochrane RoB tool. Dichotomous outcomes were expressed as relative risks and continuous outcomes as mean differences. Homogeneity was assessed using the Chi² test, I², and visual observations of the forest plots.

Results: We included eight trials (n = 598) in the final assessment. The use of HFNC in contrast to NIV did not reduce mortality (RR 0.89, 95% CI 0.54-1.48, I² = 0%, p = 0.66, low certainty) or the risk of endotracheal intubation (RR 0.89, 95% CI 0.53-1.43, I² = 0%, p = 0.66, low certainty). Duration of hospital stay was significantly lower in the HFNC group compared to the NIV (MD = -0.89 days, 95% CI -1.67-0.11, I² = 0%, p = 0.03, low certainty).

Conclusion: HFNC is safe and effective in treating AECOPD patients with similar risks of intubation and mortality, but further randomized-controlled trials are needed to confirm these findings.

Keywords: High-flow nasal cannula, non-invasive ventilation, COPD, respiratory failure

OP-No.: 45

Rheumatoid Arthritis Associated Interstitial Lung disease Management: Initial Experience from a Budding Interstitial Lung Disease Clinic from Central India

Authors – Dr Vikas Kumar, Dr Ranganath T Ganga, Dr Ajoy Kumar Behera, Dr Jhasaketan Meher, Dr Saroj Pati

Background and Objectives: Interstitial lung disease (ILD) in rheumatoid arthritis (RA) is a serious complication with varied prevalence ranging from 4% to as high as 68%, with varied presentation. The clinico-demographic profile and presentation in our country needs to be further explored. We aimed to study the clinico-demographic, serologic, lung function profile, antifibrotic tolerance and quality of life among RA ILD patients from Central India.

Methods: A prospective observational study was conducted in the ILD Clinic in the Department of Pulmonary Medicine, All India Institute of Medical Sciences, Raipur, India, between January 2022 to January 2023. RA patients with dyspnea and chronic cough were referred to us for evaluation of ILD. Patients underwent clinical examination, complete lung function study including spirometry, single breath diffusion capacity for carbon monoxide (DLCO), 6-minute walk test and high-resolution computed tomography (HRCT) of thorax. Quality of life was assessed using the KBILD questionnaire.

Results: Two Hundred Eighteen RA patients were evaluated and out of these, 26 (2.18%) had ILD. The mean ± SD age of the patients was 52.96 ± 14.04 and majority (77%) were females. Fourteen (53.38%) patients had UIP/probable UIP pattern and 12 (46.22%) had NSIP pattern on HRCT. The mean ± SD FVC % predicted was 62.5 ± 20.04. The mean ± SD DLCO percentage predicted was 54.4 ± 22.8. Fourteen (53.8%) patients were on nintedanib and 10 (38.4%) were on pirfenidone. Twenty-two (84.6%) patients did not experience any side effects. The mean ± SD KBILD score was 59.9 ± 11.17 and was similar in both the sexes.

Conclusion: In our study, RA ILD was more common in females. Both genders with RA ILD have similar quality of life. Maximum patients didn't experience any side effect but nintedanib was better tolerated.

Keywords: RA ILD, KBILD, pirfenidone, nintedanib

OP-No.: 46

How Informed are Bronchial Asthma Patients About the Disease: A Questionnaire-based Study

Authors – Dr Athira Chandran T, Dr Hemalatha VS, Dr Zone Xavier

Background: Asthma is chronic inflammatory, airway hyperresponsiveness, reversible disorder which occurs at any age, and requires special attention, towards its management and maintenance therapy. However, patient awareness regarding the disease remains lacking. The need of the hour to facilitate a complete knowledge about asthma with the aim of improving their attitude towards disease management, medication adherence as well as the treatment outcomes.

Aim: The study aimed to evaluate the knowledge about their disease among asthma patients attending a tertiary care hospital.

Objectives: To assess the knowledge of the asthma patients towards their disease.

Methods: This was a prospective, observational, questionnaire-based study in a tertiary care teaching hospital for a period of 6 months. A sample of 100 outpatients and inpatients of Pulmonary Medicine Department in the age group 14-60 was considered for the study and the data was collected through face-to-face interview by administering a questionnaire containing 38 questions for the assessment of patients' knowledge towards the bronchial asthma disease. Questions in the questionnaire were divided into etiology, pathophysiology, symptoms and severity, medication, prevention and natural history. Demographic details of individual patients were collected in the questionnaire. The data collected was used to correlate the disease awareness among patients of different age groups, education backgrounds, and occupational statuses. Descriptive data analysis of all baselines, predictive and outcome variables will be done using Chi-square test. The determinants of the compliance were analyzed by univariate and multivariate logistic regression analyses.

Result: Odds ratio (OR) for compliance with their 95% CI were reported. $P < 0.005$ was found to be statistically significant. Suggest enlisting the important findings, for instance - awareness among various participant groups regarding different aspects of the disease

Conclusion: A good level of knowledge about asthma and better practices are rigorously important to prevent asthma exacerbations. More comprehensive, regular and patient-centered counseling programs will be beneficial in improving awareness of asthma. Physicians and patients need to work together to develop an asthma care programs that aims for a life free from asthma.

Keywords: Bronchial Asthma, Pulmonary Medicine, airway, hyper-responsiveness

OP-No.: 47

Proportion of RLS and Insomnia in COVID Survivors: An Interim Analysis

Authors – Dr Lokesh Kumar Saini, Dr Kaustav Kundu, Shivashish Dobhal, Ranjeet Kumar, Dr Abhishek Goyal, Dr Ravi Gupta, Dr Niraj Kumar

Background: Preliminary reports suggest that sleep quality is affected after contracting COVID-19 infection, even in otherwise asymptomatic patients as well as patients requiring respiratory support. This study was planned with aim to find out the status of sleep health and the factors related to sleep disorders in COVID survivors.

Methods: This study was funded by Indian Council of Medical Research as a multicenter (AIIMS Bhopal and AIIMS Rishikesh) study. The contact details of COVID positive patients were collected from the hospital record and covid survivors were asked to report the sleep clinic of the respective centers. We gathered data related to their sleep health with the help of thorough clinical history and physical examination.

Results: In this interim analysis, we have evaluated the data of 132 COVID survivors. The mean age was 41.12 ± 32.0 years, 61.4% were male. The proportion of patients having restless leg syndrome, insomnia symptoms and clinical insomnia were 13.6%, 21.21% and 19.7%, respectively. Among patients with insomnia symptoms and clinical insomnia, 46.4% of them developed (20.4%) or worsened (26%) their symptoms after COVID infection. The factors associated with presence of RLS were history of hospitalization ($P 0.001$) and requirement of supplemental oxygen during hospitalization ($p 0.007$), while history of hospitalization, oxygen or ICU requirement during hospitalization were not related with presence of insomnia.

Conclusion: The prevalence of RLS and clinical insomnia was found 7 times and 2 times higher in COVID survivors than general population. Considering the deleterious impact of these sleep disorders on health, our study highlight the importance of active search of sleep disorders in COVID survivors.

Keywords: Post COVID, hospitalization, oxygen, ICU

OP-No.: 48

Major Depressive Disorder among Patients with Tuberculosis and Impact of TB Treatment on Depression

Authors – Dr Suganthi S, Dr M Sravan Kumar, Dr P Ravi, Dr P Sunitha

Introduction: Tuberculosis (TB) is a chronic infectious multisystemic disease causing major illness, most often affects lungs and it is one among the leading cause of mortality in the world-wide. Depression among TB patients is a common comorbidity which is often unrecognized and untreated. It constitutes a major risk factor for higher default rates due to non-adherence to the treatment, thereby affecting the treatment outcome. The present study aimed at to determine the incidence of major depressive disorder among patients with TB and to know to what extent TB treatment alone is effective on major depressive disorder.

Methods: All the patients who had been diagnosed TB were screened for major depressive disorder with the help of ICD – 10 scale once the patient segregated with inclusion and exclusion criteria. A prospective cohort study conducted in patient with major depressive disorder in TB patients and determine the impact of ATT on the outcome of depression.

Results:

- Total number of TB patient: 115.
- Total number of patients diagnosed major depressive disorder among 115 patients: 48 (42%).
- Most common in the age group between 31-40 years: 28.8%.
- Female > male
- In the follow-up of 45 patients at the end of intensive phase the prevalence of depression reduced to 84.40% and at the end of continuation phase still reduced to 55.50% only with ATT.

Conclusion: Major depressive disorder is an Iceberg phenomenon in patients with TB and which can be the indirect cause of failure rate in treatment. This study concluded the risk of developing depression in TB patient and the importance of ATT which in turn treating depression.

Keywords: Tuberculosis, depression, attention training technique

OP-No.: 49

OSA in Young Population: A New Dynamic

Authors – Dr Ayushi Gupta, Dr Yasmoon Siddiqui, Dr Lalit Singh, Dr Rajeev Tandon, Dr Yatin Mehta

Background: Obstructive sleep apnea (OSA) is defined by the presence of repetitive episodes apnea hypopnea index (AHI >5) of upper airway obstruction during sleep. This study aims to assess the polysomnographic characteristics of OSA in young populations (<50 yrs age).

Methodology: A prospective observational study of young individuals, <50 years of age, was conducted at Department of Pulmonary Medicine, from June 2022-2023; all 36 participants underwent polysomnography. The study focused on outlining the various variables, comorbidities and AHI severity in this cohort.

Results: Out of 36 participants selected, 33 were found to have OSA. These included of 33% (n = 12) females and 66% (n = 24) males. Of note, nearly 55.5% (n = 20) of the participants had severe OSA (AHI ≥35) of which 85% (n = 17) were males. Almost 21% (n = 25) of the population had an underlying obstructive airway disease. Smokers constituted about 55% (n = 19) of the cases. Smoking was found to be an independent risk factor for OSA prevalence as well as severity. In addition, ENT chest wall disorders and thyroid disorders were common findings among severe and moderate AHI patients (16%, n = 15 and 10%, n = 9) - which prevailed among the females. Female participants reported an increased incidence of asthma, ENT symptoms and hypothyroidism: as compared to men. Smoking was found to be an independent risk factor for OSA incidence and severity.

Conclusion: OSA in young population is an overlooked diagnosis. Average AHI for the study population was (42.525). Overall, males had a two-fold higher propensity for developing OSA at young age. Chest wall disorders, thyroid disorders and underlying obstructive airway diseases showed a higher predisposition for developing this condition.

Keywords: Young, OSA, AHI, smoker, comorbidity.

OP-No.: 50

Convergence of Clues in Decoding the Etiology of Pleural Diseases – Do CT Scans Ring a Bell?

Authors – Dr Jasti Venkata Suneel Kumar, Dr A Fathahudeen, Dr Kiran Vishnu Narayan

Background and Objectives: Lymphocytic exudative pleural effusions form a major chunk of undiagnosed pleural pathologies. Diagnostic rate for pleural fluid cytology is of about 60% in malignant pleural effusions. However, there is currently no criteria to predict the yield of pleural fluid cytology. This study utilizes clues on thoracic CECT (CT) scans which would predict a higher yield of pleural fluid cytology positivity.

Material and Methods: Cross-sectional study over 6 months. All consecutive patients with lymphocytic exudative pleural effusion underwent a thorough scrutiny of CT with three serial diagnostic thoracentesis for cytology and thoracoscopic biopsy as gold standard diagnostic tool. We categorized the CT findings as 3 groups namely- a subpleural band like thickening, diffuse pleural thickening and focal pleural nodules alone and analyzed if any group showed a higher and sustained yield of malignant cells.

Results:

- CT subpleural band group showed a positive correlation with pleural fluid cytology on first attempt ($r = .545, p < 0.05$) and in all attempts ($r = .733, p < 0.05$).
- CT diffuse pleural thickening had pleural fluid cytology positivity at least once (positive correlation, r value - $.504, p < 0.05$).
- CT focal pleural nodules had pleural fluid cytology negative in any given attempt (positive correlation).

Conclusion: Utilizing the above categorization can aid in early triaging of suspected malignant pleural effusions as highly diagnostic on cytology alone at resource limited centers without thoracoscopy facilities.

Keywords: Diffuse pleural thickening, pleural fluid cytology, thorax CECT (CT), malignant

OP-No.: 51

Utility of Thoracic Ultrasound for Predicting the Success of Weaning from Mechanical Ventilation in Patients Admitted to Respiratory ICU

Authors – Dr Vishnu K, Prof Dr Suraj KP, Dr Shone P James

Background and Objectives: Weaning from mechanical ventilation (MV) is of paramount importance for patients with respiratory failure requiring MV. Diaphragm weakness is common in patients undergoing MV and is likely a contributing factor of weaning failure. Also, lung ultrasound can be used in assessment of lung aeration which can be helpful during the weaning process. Our objective is to evaluate the use of diaphragmatic thickening fraction, diaphragmatic excursion and lung ultrasound score for predicting the success of weaning from MV.

Methods: Sixty-five patients on invasive MV fulfilling criteria of weaning shifted to spontaneous breathing trial (SBT) (using PSV 8 cm H₂O and PEEP 5). They were assessed by ultrasound during SBT evaluating diaphragmatic excursion (DE), end inspiratory and expiratory diaphragmatic thickness, diaphragmatic thickness fraction (DTF) and lung aeration by ultrasound score. All results were collected and analyzed.

Results: Out of 65 patients, 45 were males (70%). SBT was successful in 49 patients (75%). Diaphragmatic excursion was higher in successful SBT group with a mean value of 1.41 cm compared to 0.91 cm in failed SBT group ($p = 0.02$). Diaphragmatic thickening fraction was also higher in successful SBT group with a mean value of 33.5% compared to 23% in failed SBT group ($p = 0.004$). Lung ultrasound score was lower in successful SBT group with a mean value of 13.8 compared to higher ultrasound score of 17.8 in failed SBT group ($p = 0.01$). Among the 49 patients with successful SBT, 36 patients had successful weaning, 9 patients were in a category of “weaning in progress with NIV” and were gradually weaned; 4 patients had failed weaning.

Conclusion: For the patients undergoing weaning process, diaphragmatic excursion, diaphragmatic thickening fraction and lung ultrasound score can be used as additive new parameters for prediction of weaning process outcome.

Keywords: Weaning, diaphragmatic excursion, diaphragmatic thickening fraction, lung ultrasound score

OP-No.: 52

Predictors of Difficult Weaning among Mechanically Ventilated Patients in Respiratory ICU

Authors – Dr Anjana Satheesh, Dr PV Santhoshkumar, Dr Shone P James

Background: Weaning refers to the progressive withdrawal of support that a patient receives from mechanical ventilator. Weaning failure is associated with prolonged hospital stay and increased morbidity and mortality. In addition to the burden it places on their patients and families, it also imposes high costs on the public health system.

Aims and objective: To evaluate the characteristics of patients who had difficult weaning post mechanical ventilation for acute hypercapnic respiratory failure, and identify predictive factors related to difficult weaning in these cases compared to those with simple weaning.

Material and Methods: This study was undertaken in the Respiratory Intensive Care Unit of a tertiary center and included 82 patients, mechanically ventilated for acute hypercapnic respiratory failure, 41 each, in the simple and difficult weaning groups. Various risk factors including age, smoking status, duration of mechanical ventilation, acute physiology and chronic health evaluation (APACHE) II score at the time of ICU admission, electrolyte imbalance, ABG, nutrition, diaphragmatic excursion and thickness, ventilator parameters, delirium, cumulative fluid balance, RSBI, drug use during ICU stay, myocardial ischemia, radiological changes, and impaired thyroid function were assessed.

Results: In this study, a majority of the patients were males in both groups with a mean age of 64 ± 3.4 in simple weaning and 76 ± 6.8 in difficult weaning. This study reported significant risk factors for weaning failure including nutritional status (53.7%, $p = 0.007$), positive cumulative fluid balance (26.8%, $p = 0.037$), hypoalbuminemia ($p < 0.001$), hypophosphatemia (< 0.001), hypercapnia ($p = 0.023$), prolonged use of neuromuscular blockers (14.6%, $p = 0.026$) and sedatives (24.4%, $p = 0.026$), leukocytosis (78%, $p = 0.048$), new chest X-ray changes (19.5% $p = 0.024$) and new positive culture of tracheobronchial aspirate ($p = 0.041$).

Conclusion: Malnutrition, positive fluid balance, ventilator-associated pneumonia, prolonged use of sedatives and neuromuscular blockers, and hypophosphatemia could be important risk factors for weaning failure. An increase in the APACHE II score and a longer mechanical ventilation duration before the weaning trial could intensify the risk. Meanwhile an RSBI below 85 breaths/min/L may increase the rate of weaning success.

Keywords: Mechanical ventilation, weaning, intensive care unit

OP-No.: 53

Hemoglobin and Red Blood Cell Indices in Children Under 5 Years with Tuberculosis in India

Authors – Dr Aishwarya Venkataraman, Dr Nancy Hilda J, Dr Brindha B, Dr Magaiyarkarasi, Dr Karthick M, Dr Subha S, Dr Sarath Balaji, Elilarasi S, Dr Luke Elizabeth Hanna, Dr Andrew J Prendergast

Background and Objectives: There is evidence that the prevalence of anemia is greater among tuberculosis (TB) patients compared to those infected with *Mycobacterium tuberculosis* and healthy controls. Information regarding anemia during TB diagnosis among children younger than 5 years of age remains limited. This study aimed to determine the prevalence of anemia among TB patients younger than 5 years old. To characterize the hemoglobin (Hb) and red blood cell indices among children under 5 years of age with TB and/or latent TB infection.

Methodology: We analyzed and compared the levels of Hb, MCV, MCHC and RDW in three groups of children; LTBI-negative [TB-exposed, tuberculin skin test (TST)-negative], LTBI-positive [(TB-exposed, TST-positive), and active TB]. All children were HIV-negative and BCG-vaccinated at birth. Children with TB disease were treatment-naïve, and started ATT after their baseline assessment. All TB-exposed children (both LTBI-negative and LTBI-positive) started isoniazid prophylaxis. At diagnosis, 2 mL of EDTA blood was drawn and hematological analyses were measured using a BC-5150 Analyser (Mindray Global, China) within 2 hours. Dunn's test was used with multiple testing correction using Holm's test.

Results: Three groups of children aged 12-60 months – with a median age of 36 months (IQR 22, 46), of whom 51% (79/156) were males, were enrolled from the outpatient clinics of four pediatric hospitals in Chennai, India; LTBI-negative ($n = 73$), LTBI-positive ($n = 46$), and active TB (microbiologically confirmed; $n = 37$). Of the 156 children, 36% (53/156) were anemic ($Hb < 11g/dL$); 54% in TB and 26% in LTBI-positive and -negative together. Children with TB had high RDW but low Hb, MCV and MCHC when compared with LTBI-negative children; RDW ($p = 0.0001$), Hb ($p = 0.03$), MCV ($p = 0.01$) and MCHC ($p = 0.004$).

Conclusion: To our knowledge, this is one of the first studies conducted in children under 5 years with TB and LTBI that describes the differences, in the Hb levels and RBCs indices. These may be further explored as potential surrogate indicators for the diagnosis and monitoring of TB.

Keywords: Platelet, TB, PLR, MPV, LTBI, pediatric

OP-No.: 54

Clinical Profile, Severity of Nicotine Dependence and Predictors of Abstinence in Patients Attending Smoking Cessation Clinic in a Tertiary Care Center in Southern India

Authors – Dr Ashwini Kesavalu, Dr Avinash A Nair, Dr Richa Gupta

Background: Tobacco smoking is deemed among the leading risk factors that contribute to the global burden of respiratory diseases. While tobacco smoking-associated is a health hazard, smoking cessation can gradually reverse the health risks, especially smoking in younger individuals. Many smokers take several attempts to quit, but commonly fail to stay abstinent. We planned this study with the aim of investigating the factors affecting smoking cessation and tobacco dependence.

Methods: The study was carried out over 18 months. The objective was to assess the severity of nicotine dependence based on Fagerstrom Test for Nicotine Dependence (FTND) questionnaire and to assess factors influencing smoking cessation.

Patients their were provided with individual behavioral counseling based were allotted based on the individual FTND scores, while nicotine replacement therapy (NRT) and/or pharmacotherapy. The follow-ups were conducted at 6 months.

Results: A total of 360 patients were the enrolled, of which of the participants only 143 quit smoking within 6 months. Based on FTND scoring, 31% patients had high nicotine dependence. Among the patients who quit smoking, 63% had low FTND scores and 27% had moderate-to-high nicotine dependence scores.

Among the various factors - Age, occupation, education, socioeconomic status, concomitant addiction and presence of comorbidities did not show any significant association to abstinence. Patients with a low FTND score and those who smoked cigarettes only, versus the bidi smokers and patients who smoked tobacco versus those who used both smoking and smokeless tobacco had better abstinence. Patient who received Counseling + NRT also showed better abstinence.

Conclusion: This study concluded that patients with low Fagerstrom scores and those using only one form of tobacco had better abstinence from smoking. Further, appropriate Counseling + NRT interventions helps acheive better abstinence rates. Hence, it is imperative that smokers should receive early interventions targeting smoking cessation the health-related, ; such strategies help maintain abstinence and prevent ill effects of smoking.

Keywords: Smoking cessation, nicotine dependence, Fagerstrom score, abstinence

OP-No.: 55

The Impact of Air Pollution on Chronic Obstructive Pulmonary Disease Exacerbations

Author – Dr Pavani Chinnapaka

Background and Objectives: Chronic obstructive pulmonary disease (COPD) is a debilitating respiratory disorder characterized by persistent airflow limitation. COPD exacerbations lead to hospital admissions, reduced quality of life, and are a significant cause of mortality. This observational study aims to scrutinize the association between specific air pollutants, namely PM_{2.5} and NO₂, and the rate of COPD exacerbations.

Methods: In this 12-month observational study, a cohort of 100 COPD patients was meticulously monitored. The sample comprised 60 males and 40 females with a mean age of 64.5 years. Data on various air pollutants, including PM_{2.5}, PM₁₀, NO₂, and SO₂, were sourced from local air quality monitoring stations. Each exacerbation episode was recorded, and its relation to air pollution levels was investigated using multivariable logistic regression models. Confounding variables like age, gender, and smoking history were taken into account.

Results: Among the enrolled subjects, 45 experienced at least one exacerbation during the study period, translating to an average of 1.2 exacerbations per individual. Our analyses revealed that elevated PM_{2.5} levels were significantly associated with an increase in COPD exacerbations, with an odds ratio (OR) of 1.35 (95% CI: 1.05-1.72, p = 0.02). Even after adjusting for confounding variables, the association remained statistically significant (adjusted OR = 1.29; 95% CI: 1.01-1.65, p = 0.04). NO₂ levels also showed a trend toward significance, although it did not reach the conventional threshold (OR = 1.25; 95% CI: 0.98-1.60, p = 0.07).

Conclusion: The study provides compelling evidence that higher levels of PM_{2.5} are associated with an increased risk of COPD exacerbations. These findings underscore the imperative of monitoring air quality and advocate for public health interventions aimed at air pollution reduction as a part of comprehensive COPD management strategies.

Keywords: COPD exacerbation, air pollution, PM_{2.5}, NO₂, observational study, risk factor

OP-No.: 56

Effect of Metformin on Systemic Chemokine Responses During Antituberculosis Chemotherapy

Authors – Dr Nathella Pavan Kumar, Dr Chandrasekaran Padmapriyadarsini, Dr Arul Nancy, Dr M Tamizhselvan, Dr Anant Mohan, Dr Deverajulu Reddy, Dr N Poorana Ganga Devi, Dr Prabakaran Rathinam, Dr Bharathi Jeyadeepa, Dr RK Shandil, Dr Randeep Guleria, Dr Manjula Singh, Dr Subash Babu

Background and Objectives: Tuberculosis (TB) is a significant threat to global health due to the lack of shortened antimicrobial treatment, the paucity of a highly effective preventive or therapeutic vaccine. Metformin (MET), by boosting immunity, reducing intracellular *Mycobacterium tuberculosis* (Mtb) growth and facilitating phagolysosomal fusion has been suggested as host-adjunctive therapy to antituberculosis treatment (ATT). We investigated the influence of metformin on the plasma levels of a wide panel of chemokines in a group of active TB patients before treatment, 2nd month of ATT and at 6 months of ATT.

Methods: The study is part of the larger clinical trial entitled “Evaluation of metformin in combination with rifampicin containing antituberculosis therapy in patients with new, smear-positive pulmonary tuberculosis (METRIF): study protocol for a randomised clinical trial.” To study the immunological effects of metformin, enrolled adults with newly diagnosed culture positive PTB, n = 82 individuals in Test regimen – standard regimen plus daily 1000 mg MET (MET-HREZ = Metformin arm) in the first 8-week of ATT or n = 81 control regimen standard regimen alone (HREZ = Non-metformin arm) were included in the study.

Results: Our results demonstrated that addition of metformin resulted with diminished CC chemokines such as CCL1 (p = 0.0033) and CCL3 (p = 0.0088) and CXC chemokines CXCL-2 (p = 0.0400) and CXCL-10 (p = 0.0032) in MET arm as compared to nonmetformin arm during the 2nd month of ATT and at the 6 months completion of ATT. In addition to this, metformin arm showed significantly diminished chemokines CCL1 (p = 0.0017) CXCL-10 (p < 0.0001), CCL-3 (p = 0.0109) and CXCL-11 (P = 0.0317) in individuals with high bacterial burden and cavitory disease during the 2nd month of ATT.

Conclusions: In conclusion, the data presented here show that metformin shifts chemokine responses during ATT and could therefore dampen excessively inflammatory chemokine responses. In summary, metformin efficiently regulates the balance between inflammation and effective host responses to Mtb.

Keywords: Tuberculosis, chemokines, metformin, anti-TB treatment

OP-No.: 57

Early Real-World Experience on Effectiveness of IL-5 Targeted Therapies for Severe Eosinophilic Asthma Patients in India

Authors – Dr Prerna Galhotra, Dr Manu Chopra, Dr IM Pandey, Dr T Ajai Kumar

Background and Objectives: Safety and efficacy of IL-5 targeted therapies such as benralizumab and mepolizumab have been demonstrated in several Phase III clinical trials and are recommended for the management of severe eosinophilic asthma (SEA) by various society guidelines including GINA 2023. There is a paucity of real-world data regarding the effectiveness of these medications from India owing to their recent availability in the country (benralizumab in 2021, mepolizumab in 2019). The objective of our study was to evaluate the effectiveness of IL-5 targeted therapies in SEA patients in a tertiary care chest center of the Indian Armed Forces.

Methods: A retrospective observational study evaluated the effectiveness of biological agents targeting the IL-5 pathway in SEA patients since 1st January 2020 concerning annualized exacerbation rate, yearly hospital admissions, and oral corticosteroids treatment (OCS) in 1 year versus baseline.

Results: A total of 47 SEA patients (Male-38, Female-09) on IL-5 targeted therapies [mepolizumab (n = 38), benralizumab (n = 9)] were included in the analysis. The mean age of the patients was 52 years (18-74 years) and the mean duration of treatment on mepolizumab was 2 years 3 months and for benralizumab was 1 year and 3 months. There was a 70% reduction in annualized exacerbation rate, an 83% reduction in yearly hospitalizations and 72% of patients discontinued oral corticosteroids.

Conclusion: The real-world experience of IL-5 targeted therapies in SEA from developing country like India confirmed their effectiveness.

Keywords: Severe eosinophilic asthma, IL-5, benralizumab, mepolizumab

OP-No.: 58

Developing a Sustainable Model for Identification and Management of Tuberculosis Infection in Contacts of DRTB Patients in Khammam District, Telangana, India: A Pilot study

Authors – Dr C Sumalata, Dr V Subba Rao, Dr A Rajesham, Dr Sudhir Prasad, Dr Sneha Shukla

Background: Diagnosing tuberculosis (TB) infection among the household contacts (HHCs) of the drug-resistant TB (DRTB) patients and treating them with appropriate TB preventive treatment (TPT) is one of the important components of the National TB program which needs more attention.

Objectives: To identify all the contacts of DRTB by contact screening with a sustainable model. To manage and treat all those who were diagnosed with TB infection in contacts of index TB patients.

Methods: A pilot study was conducted in Khammam district of Telangana state. All the HHCs of DRTB patients in the year 2022-23 were screened for active TB symptoms and after ruling out active TB, the eligible were offered with chest X-ray and interferon gamma release assay (IGRA) tests simultaneously to test for TB infection.

Results: The study showed the positivity rate as high as 29% (70 IGRA positive out of 244 tested). Initiating an appropriate regimen would decrease the possibility of TB infection developing into active TB disease.

Conclusion: A pilot study in Khammam district of Telangana state aimed to diagnose and treat TB infection among household contacts of DRTB patients. The study involved chest X-ray and IGRA tests simultaneously. Implementing appropriate preventive treatment regimens can decrease the risk of TB infection developing into active disease.

The results of the study were as follows	
Total number of household contacts of DRTB	305
Total number of contacts screened	249 (<5 years were 5) - 82%
Total number of contacts with chest X-ray	230 (94%)
Total number of contacts tested on IGRA	244 (100%)
Total number diagnosed with TB infection	70 (29%)
Total number Initiated on appropriate regimen	69 (99%)
Total number completed the treatment for TB infection	44 (65%)
Total number of active diagnosis among the DRTB contact	0

Keywords: TB preventive treatment, household contacts, drug-resistant TB

OP-No.: 69

A Study on Comparison Between DECAF and Modified DECAF Scores in Predicting in Hospital Mortality Rates in Acute Exacerbation of COPD

Authors – Dr Moganti Veera Lakshmi Aparna, Dr Ch RN Bhushana Rao, Dr B Padmaja, Dr DV Pratap Reddy

Background: Chronic obstructive pulmonary disease (COPD) indicates chronic airflow obstruction that develops most often due to chronic tobacco smoking, but also after exposure to biomass fuels. Acute exacerbation of chronic obstructive pulmonary disease (AECOPD) are common and lead to devastating consequences. Accurate prognostic tool for patients with exacerbation who required hospital admission is needed to predict the risk of in-hospital mortality and help physicians to select appropriate level of care.

Methods: A hospital-based prospective, observational study was done in 60 patients with AECOPD admitted in the Chest Department in GHCCD, Visakhapatnam. All patients underwent complete medical history taking, chest examination, dyspnea assessment by extended MMRC dyspnea, CBC, chest radiograph, ECG and ABG. Both conventional DECAF score and modified DECAF score were calculated. In-hospital mortality rate was recorded.

Results: Five patients (8.33%) died during their hospital stay. The modified DECAF score showed a good prediction of in-hospital mortality and was higher in accuracy than the original DECAF score. Both were 100% sensitive but the modified DECAF score was more specific than the DECAF score.

Conclusion: Both the original DECAF score and the modified DECAF score are practical and can be calculated easily using simple questionnaire and routine investigations available during the admission. Both were good predictors of in-hospital mortality and the requirement of invasive mechanical ventilation. The modified DECAF score was superior in predicting in-hospital mortality than the original score.

Keywords: AECOPD, DECAF score, frequency of hospital admissions, atrial fibrillation, prediction, mortality.

OP-No.: 70

Comparison of Asthma Control in Patients Using Inhalational Corticosteroids and Long-acting Beta2-Agonists Delivered by Pressurized Metered-dose Inhalers versus Dry Powder Inhalers

Authors – Dr Harshitha Madanapalli, Dr Santhosh Kumar PV, Dr Anjana Babu

Background: Despite availability of various treatment options and periodical updates of GINA guidelines since 1995, still there is suboptimal asthma control, one of the main reason being inhaler compliance and adherence. present study is designed to evaluate asthma control in outpatients of stable asthma and to compare efficacy of inhalational corticosteroids and long-acting beta2-agonist delivered by pressurized metered-dose inhalers and dry powder inhalers.

Methods: This comparison study is a cohort study and it involves outpatients attending pulmonary medicine department and are consecutively recruited during their regular visits till the sample size of 196 is obtained and kept in follow-up for 6 months and each group of 98 is assessed for asthma control with asthma control questionnaire and asthma control test at the end of 6 months and lung function values are measured at the time of diagnosis and compared to the same values at the end of study and patients are selected such that there is no significant differences in terms of spirometric values that is baseline spirometric values in both groups are comparable.

Results: This study included 196 patients and are randomly grouped under two groups with a sample size of 98 each and males were 140 (71.4%) and females were 56 (28.5%) with a mean age of 45.4 ± 15.16 years. The study reported that better asthma control seen in metered-dose inhaler group ($p = 0.012$) compared to dry powder inhaler group ($p = 0.037$), good asthma control shown with metered-dose inhalers is above 46.4%.

Conclusion: Pressurized metered-dose inhalers demonstrated better asthma control than dry powder inhalers. This could be due to improved lung deposition of the dose or less reliance on optimal inhalation technique or both.

Keywords: Metered-dose inhalers, dry powder inhalers, asthma control

OP-No.: 71

Predicting the Prognosis of Patients with Acute Exacerbation of COPD by Using CAUDA 70 Score

Authors – Dr Aryasree VM, Dr CH RN Bushana Rao, Dr B Padmaja

Background: According to the GOLD 2022 report, chronic obstructive pulmonary disease (COPD) is one of the top three causes of death, worldwide. Although acute exacerbations are common among COPD patients and most such deaths occur during the exacerbations, a widely accepted prognostic scoring system that can assess the severity of such exacerbations and predict the prognosis and outcome of these patients at presentation, remains lacking. In this study, a prognostic scoring score called CAUDA-70 (Confusion, Acidosis, Urea, MRC-Dyspnea score, Albumin) is used to assess and predict the outcomes of COPD patients.

Materials and Methods: A hospital-based prospective observational study was conducted among 60 COPD patients who fulfilled the inclusion and exclusion criteria. CAUDA-70 score variables were obtained for each patient at the time of admission. Each variable was allotted 1 point. All patients were followed until hospital discharge or death, whichever preceded. The outcomes were assessed based on, whether recovered with conservative treatment and without need for ventilator support, or recovered with ventilator support and death. The outcome of each patient was correlated with their respective CAUDA-70 score.

Results: The majority of the patients with acute exacerbation of COPD belonged to the age group 61 to 70 years [26 (43.3%)]. Out of the 60 patients, 51 (85%) were males. As per the CAUDA-70 score, 29 (48.3%) patients experienced confusion. Blood urea nitrogen (BUN) levels of ≥ 7 mmol/L was detected in 27 (45%) patients, and the dysnea MRC ≥ 4 was found in 43 (71.6%) patients. Overall 19 (31.6%) patients scored a 3 in the CAUDA-70, 16 (26.6%) had a score of 4, 7 (11.6%) scored 5, while a total score of 6 was recorded among 2 (3.33%) patients. Among those patients who scored < 3 , 5 required ventilator support. There were a total of 6 in-hospital deaths during the course of the treatment, all of which occurred among those who scored between 3 to 6 in the CAUDA-70 system.

Conclusion: CAUDA-70 score can be easily calculated in patients with acute exacerbation of COPD by using physical findings and routine laboratory investigation. The findings of this study showed that a CAUDA-70 score of ≥ 3 is associated with an increased need for ventilator support and mortality, indicating a poor prognosis.

Keywords: CAUDA 70, COPD-AE, prognosis, mortality

OP-No.: 72

Platelet Numbers and Indices as Prognostic Biomarkers in Children Under 5 with Tuberculosis in India

Authors – Dr Nancy Hilda J, Dr Aishwarya Venkataraman, Dr Kannan Thiruvengadam, Dr Brindha B, Dr Karthick M, Dr Subha S, Dr Sarath Balaji, Dr Elilarasi S, Dr Melanie Smuk, Dr Luke Elizabeth Hanna, Dr Andrew J Prendergast

Background: In a scenario where diagnosis/prognosis of a child with tuberculosis (TB) is a challenge we aimed to utilize the already available platelet (and its indices) values from the hematological profile that will provide early clues about the immune status of TB patients younger than 5 years old.

Objectives: To explore platelet numbers and platelet indices including mean platelet volume (MPV) and platelet lymphocyte ratio (PLR) for their potential in distinguishing children with latent tuberculosis infection (LTBI) from TB disease and healthy.

Methodology: Three groups of children aged 1 to 5 years were enrolled from Chennai, India. LTBI-negative (TB-exposed, TST-negative; n = 73), LTBI-positive (TB-exposed, TST-positive; n = 46), and active TB (symptomatic and positive TB smear and/or NAAT; n = 37). All children were followed up at three-time points; baseline, 12 weeks and 24 weeks. Each time, 2 mL of EDTA blood was drawn by a trained phlebotomist and the hematological analytes were measured using a BC5150 Analyzer (Mindray Global, China) within 2 hours amongst which platelets, MPV and PLR are reported here. STATA v15.0 (Stata Corporation, College Station, TX, USA) was used for quantitative analysis. A two-sided Kruskal–Wallis test was performed to determine statistical significance in all analyses using an alpha level of 0.05 followed by Dunn’s test with multiple testing correction using Holm’s test.

Results: We observed significant differences between the groups in platelet numbers (p = 0.0001), PLR (p = 0.0048) and MPV (p < 0.0001) at baseline. Platelet counts were significantly higher in children with TB disease [median (IQR): 449 (376, 524)] compared to LTBI-positive [370 (307, 450)] and LTBI-negative [345 (281, 397)] children, while MPV was significantly lower in children with TB disease [8.4 (7.7, 8.9)] compared to LTBI-positive [8.8 (8.4, 9.4)] and LTBI-negative [9.3 (8.4, 10.0)] children. Over time, platelet count (p = 0.002) and PLR (p = 0.01) decreased significantly in children with TB. By contrast, the MPV values remained persistently lower in the TB group, even at week 24.

Conclusion: Our observations emphasize the importance of platelet numbers, MPV and PLR in assessing the diagnosis/prognosis of TB which warrants further research.

Keywords: Platelets, PLR, MPV, tuberculosis, prognosis

OP-No.: 73

Use of CURB-65 and NEWS-2 Scores versus MGAP Score to Predict Mortality in Interstitial Lung Disease Patients Hospitalized with Acute Respiratory Deterioration

Authors – Dr Aardra Dutt, Dr R Sunil Kumar, Dr Praveena, Dr JV Praveen, Dr Venkaiah, Dr Srija

Background: The Confusion, Urea, Respiratory rate, Blood pressure plus age ≥ 65 years (CURB-65) score is an illness severity score validated against a 30-day mortality in pneumonia. The National Early Warning Score 2 (NEWS-2) was introduced initially as a predictor of patient deterioration. This study analyses the efficiency of these illness severity scores as compared with Modified Gender-Age-Physiology (MGAP) score in predicting the in-hospital mortality and 90-day mortality of interstitial lung disease (ILD) patients admitted with respiratory failure.

Objective: To assess the efficiency of CURB-65 and NEWS-2 severity scores to predict the in patient mortality and 90 days mortality following acute respiratory failure in-patient with interstitial lung disease (ARF-ILD) hospitalization against MGAP score.

Methods: A retrospective study was conducted including 30 known cases of ILD patients admitted with acute respiratory failure. CURB-65 and NEWS-2 scores were calculated for each patient. Both these scores were compared with MGAP score which includes age, gender and forced vital capacity. Receiver operating characteristics (ROC) curve analyses was used to quantify the strength of discrimination for NEWS-2, CURB-65 scores and MGAP score. The patients were followed up to 3 months.

Results: NEWS-2 showed higher predictive value for in-hospital and 90-day mortality. A derived threshold ≥ 6.5 was found to be 78% sensitive and 60% specific for predicting in-hospital and 70% sensitive and 65% specific for predicting the 90-day mortality. CURB-65 showed a modest predictive value for the in-hospital and 90-day mortality with the optimal derived cut-off CURB-65 ≥ 3.5 . The MGAP score addition improved the predictive ability of NEWS-2 and CURB-65.

Conclusion: Simple illness severity scores may be used for assessing the prognosis of ARF management of ILD patients and help in early decision-making.

Keywords: CURB-65, NEWS-2 scores, MGAP score, lung disease, respiratory rate

OP-No.: 74

Identifying Different Clinical Phenotypes of Obstructive Sleep Apnea: A Cluster Analysis

Authors – Dr Tushar Nijhara, Dr Archana B

Background and Objectives: Obstructive sleep apnea (OSA) is complex disease based on multiple risk factors. Understanding its pathophysiology, clinical presentation, management, treatment is a continuous process. This study was done with the objective to find out distinct phenotypes of OSA as an initial step for individualized management of OSA.

Methods: Prospective observational study was conducted among 100 subjects suspected of OSA. Based on questionnaires [(STOP-BANG, ESS scoring and Berlin questionnaire and polysomnography (PSG)] results, predictive parameters of screening tests were calculated and cluster analysis performed to identify phenotypes of OSA. Data was analyzed using SPSS 22 version software.

Results: Out of 100 subjects, 38% were males, 62% females with mean age of 51.75 ± 11.31 years. Snoring was reported in 98% subjects. Most common comorbidity reported was hypertension ((55%). PSG diagnosed 21% subjects with mild OSA, 28% with moderate OSA, 44% with severe OSA and 7% no OSA. Three clusters were formed. Cluster 1 consisted middle-aged, overweight, predominantly male population with lesser comorbidities, severe OSA and increased neck circumference. Cluster 2 consisted obese, middle-aged males with more comorbidities, severe OSA and higher neck circumference and cluster 3 had obese, middle-aged females, lesser comorbidities, less neck circumference.

Conclusion: Our study identified 3 distinct OSA clusters with distinct inter cluster characteristics like demographic, anthropometric and PSG features. OSA is a multifactorial disorder which needs to be studied further with more variables and larger sample size to establish phenotypes of OSA thereby offering better individualized treatment protocols for OSA patients.

Keywords: Obstructive sleep apnea, phenotypes, polysomnography, clusters, cluster analysis

OP-No.: 75

Comparison of Preoperative Risk Indices Using Various Scoring Systems in Determining Postoperative Pulmonary Complication

Authors – Dr Raji, Dr Natesh, Dr Anbumaran, Dr Sowmitha, Dr Gangadharn

Background and Objectives: The prevalence of postoperative pulmonary complications ranges from 2% to 70% and varies due to varied factors. Risk prediction systems employ preoperative variables to estimate the likelihood of postoperative pulmonary complications. Widely used scoring systems are the ARISCAT risk index, the Arozullah respiratory failure index, the Gupta postoperative respiratory failure risk calculator, and the Gupta postoperative pneumonia risk calculator. Validatory studies have been done, but none have compared the predictive power between them.

Methodology: This is a prospective observational study among 233 patients planned for elective surgery at Saveetha Medical College and Hospital, Thandalam. Initial assessment along with pulmonary function tests and hematological parameters were noted, and patients were stratified based on scoring systems. Patients were followed up until discharge, and complications were defined as per EPCO guidelines.

Results: In this study, we included 233 patients who underwent elective surgery. Upper abdominal (49%) and lower abdominal (38.8%) surgeries had predominant postoperative pulmonary complications. Significant risk factors for the development of postoperative complications include diabetes (49.2%), malignancy (55.7%), COPD (54.2%), smokers (20%), hypoalbuminemia, and anemia. The sensitivity and specificity of ARISCAT were 85% and 44.4%, respectively. Significant p values: 0.000 and 0.001. The sensitivity and specificity of the Arozullah respiratory failure index, the Gupta postoperative respiratory failure risk calculator, and the Gupta postoperative pneumonia risk calculator were not statistically significant.

Conclusion: The ARISCAT risk index was both sensitive and simple to employ when compared to other scoring systems. It can be used to stratify risk before surgery and identify individuals who would benefit most from risk-reduction measures. In order to prevent postoperative pulmonary complications in elderly patients having abdominal procedures, it is necessary to predict them as early as possible and to implement risk reduction measures in high-risk groups.

Keywords: Postoperative pulmonary complications, ARISCAT risk index, the Arozullah respiratory failure index, the Gupta postoperative respiratory failure risk calculator, the Gupta postoperative pneumonia risk calculator

OP-No.: 76

Clinical and Functional Characteristics of Asthma-Chronic Obstructive Pulmonary Disease Overlap in a Tertiary Care Center in Western Maharashtra

Author – Dr Utkarsh Suyal

Background and Objectives: Asthma-COPD overlap (ACO) is a heterogeneous condition that describes patients who have persistent airflow limitation with clinical features that support both asthma and COPD. The prevalence of ACO ranges from 0.9% to 11.1% in the general population depending on the diagnostic definition used. This study aimed to determine the prevalence of ACO and the clinical and functional properties of these patients, among cases of asthma and COPD in a tertiary care hospital in western Maharashtra, India.

Methods: The study was a cross-sectional study conducted at a tertiary care hospital in western Maharashtra, India. A total of 272 patients with asthma, COPD, or ACO were enrolled, over a period of 1 year. The diagnosis of asthma, COPD or ACO was made using the stepwise syndromic approach stated in the recent GINA (Global Initiative for Asthma) and GOLD (Global Initiative for Obstructive Lung Diseases) guidelines.

Results: The prevalence of ACO was 18.51%, they were younger at the time of diagnosis than those with COPD. They also had a higher prevalence of wheeze, nasal symptoms, family history of atopy, and peripheral eosinophilia. On spirometry, bronchodilator reversibility was significantly more in ACO as compared to COPD. Patients with ACO had characteristics similar to asthma but lesser bronchodilator reversibility.

Conclusion: This study suggests that ACO is more common condition in India, as compared to the West. Patients with ACO have a younger age of onset and higher bronchodilator reversibility than those with COPD. Patients with atopy who have smoke are more likely to develop fixed airway obstruction and ACO. Further studies are needed to better understand the clinical features and management of ACO.

Keywords: Asthma-COPD overlap, prevalence, India, clinical features, management

OP-No.: 77

Predicting Factors for Chronic Colonization of *Pseudomonas aeruginosa* in Bronchiectasis

Authors – Dr Y Raj Vivek, Dr BMS Patrudu, Dr Shanthi Annapurna

Background and Objectives: About 25% (range from 9% to 33%) of the patients with bronchiectasis are likely to develop a chronic colonization with *Pseudomonas aeruginosa*. The available evidence to date suggests that *P. aeruginosa* colonization in bronchiectasis is associated with poorer outcome in terms of hospital admissions, exacerbation frequency, and mortality. However, the independent patient characteristics for *P. aeruginosa* colonization are not well known. A better understanding of the predictors of acquiring *Pseudomonas* within the patient population may facilitate future focused research and identify patient subgroups, which may benefit from intensive management to prevent chronic colonization as *P. aeruginosa*. The aim of this retrospective observational study was to investigate predicting factors for *P. aeruginosa* colonization in patients with bronchiectasis.

Materials and Methods: A prospective study consisting of 60 patients with bronchiectasis was done. Data was collected for demographic details, etiology, spirometry, microbiology data, maintenance medication use, exacerbation frequency, hospital admission rate, and FACED and Bronchiectasis Severity Index (BSI) score.

Results: Overall, 25% of the patients had a chronic colonization with *P. aeruginosa*. Forty-one percent had a chronic *P. aeruginosa* colonization ($p > 0.05$). *P. aeruginosa*-positive patients were significantly associated with an older age (>55 years) ($p = 0.004$), the use of hypertonic saline (0.042), and inhalation antibiotics (<0.001). Furthermore, the presence of primary ciliary dyskinesia or PKD ($p < 0.001$) and post-infectious etiology ($p < 0.001$) as underlying causes were significantly associated with *P. aeruginosa* colonization. We observed that independent predictors for *P. aeruginosa* colonization were age >55 years, hypertonic saline, and PCD, and post-infectious etiology as underlying causes of bronchiectasis.

Conclusion: Since prevention of *P. aeruginosa* colonization is an important aim in the treatment of bronchiectasis, more attention could be directed to the following groups at risk for *Pseudomonas* colonization, namely age >55 years, hypertonic saline, and PCD, and post-infectious etiology.

Keywords: *P. aeruginosa*, colonization, spirometry, BSI

OP-No.: 78

Comparison of the Association of BAL CBNAAT on the Basis of Cycle of Threshold Value with Time to Culture Positivity

Authors – Dr Rajeev, Dr Bhagyashri Patil, Dr GS Gaude, Dr Jyothi Hattiholi, Dr Gautam S, Dr Kiran Kumar Pujar

Background and Objectives: To study the association of CT values of bronchoalveolar lavage (BAL) cartridge-based nucleic acid amplification test (CBNAAT) with time to culture positivity and bacillary burden. CT value of the CBNAAT and its role in clinical decision to predict bacillary load via culture time to positivity (TTP) has been less researched upon. This study attempted to correlate the CT value category of CBNAAT with culture positivity and TTP for 6 weeks. A semi-quantitative grading of CBNAAT positive specimens indicating bacillary load will be reported on the basis of cycle threshold (CT) value as very low (CT >28), low (CT 22-28), medium (CT 16-22) and high (CT <16).

Place of Study: Kles Dr Prabhakar, Kore Hospital & MRC, Nehru Nagar, Belagavi, Karnataka.

Duration of Study: 1 year.

Sample Size: 105

Study Design: Observational prospective study.

Results: *Interim analysis*– Of 42 samples analyzed. In 10 samples with *high* CT values, 50% showed growth in culture in 1 week and 50% in 2-4 weeks. Six samples with *medium* CT values, 60% showed growth in 2-3 weeks. However, 7 samples with *low* CT values, 80% showed no growth and 21 samples with *very low* CT values 86% showed no growth at the end of 6 weeks.

Conclusion: CBNAAT CT values of *high* and *medium* showed strong correlation with time to culture positivity. Whereas as *low* and *very low* CT values correlated majorly with negative culture growth.

Keywords: CT, CBNAAT, BAL

OP-No.: 79

Invasive vs Noninvasive Diagnostic Approaches for Microbiological Diagnosis of Hospital-acquired Pneumonia

Authors – Dr Soumya Biswas, Dr Prashant Kumar, Dr Nityananda Mandal, Dr Nilotpal Bhattachariya

Background and Objectives: Hospital-acquired pneumonia (HAP) is pneumonia that occurs 48 hours or more after hospital admission and is not present at the admission time. It continues to be a significant source of morbidity and mortality despite advancements in preventative strategies, antibiotic medication, and supportive care. Among hospital-acquired illnesses, HAP is the greatest cause of death, with estimates of its related mortality ranging from 20% to 50%. There is substantial evidence of the detrimental effect of insufficient empirical treatment on result, making the identification of the causal organism essential for directing a suitable therapy. The biggest challenge in doing a microbiological study is getting a sample from the lower respiratory system. This is mostly due to the possibility of upper airway flora contamination, which could lead to incorrect interpretation of the cultures.

Methods: A total of 150 patients with HAP in ICU of a tertiary care center. The methods used were divided as noninvasive (Sputum and endotracheal aspirate) and invasive {Fiberoptic bronchoscopy aspirate (FBAS) and bronchoalveolar lavage (BAL)}

Results: On an average three diagnostic methods were used in this research. In majority of the patients, at least one sample was applied. It was possible to obtain the microbiological diagnosis in half of the patients. Invasive diagnostic methods had good yield microbiological diagnosis than the noninvasive group.

Conclusion: A comprehensive approach can be adopted for microbiological diagnosis especially in nonventilated cases. The invasive methods were associated with higher rates of microbiological diagnosis than the noninvasive methods.

Keywords: Hospital-acquired pneumonia, microbiological diagnosis, invasive diagnostic methods, bronchoalveolar lavage

OP-No.: 80

Clinical and Bacteriological Profile of Patients on Tracheostomy at a Tertiary Care Center in South India – An Analytical Study

Authors – Dr Sravan Kumar, Dr Ameer KA, Dr P Arjun, Dr Ragitha Binu Krishnan

Background and Objectives: Tracheostomy is the preferred mode of prolonged ventilation as it allows for better clearance of secretions and enhances airway protection. Due to a breach in the natural airway barriers, there is an increased risk of bacterial colonization and subsequent complications, which are routinely encountered in critical care. We aimed to study the bacteriological profile of tracheal secretions in patients on tracheostomy at a tertiary care center in South India and also to identify the clinical spectrum of those with culture positivity.

Methods: This analytical study was conducted in KIMSHEALTH, Thiruvananthapuram between December 2022 to May 2023, among tracheostomized patients. Tracheal secretions collected under aseptic precautions were subjected to microbiological studies. All data were collected from electronic medical records and compared using statistical models to find the bacteriological profile. Clinical spectrum of patients were identified based on their symptoms and radiology at the time of sample collection.

Results: Out of the 96 patients enrolled in the study, 68 were males and 28 were females. Most were between 51 to 70 years of age. Most had either traumatic brain injury or cerebrovascular accident requiring prolonged ventilation. Bacterial growth was more commonly seen in those above 50 years of age, those on tracheostomy for more than 10 days and those on percutaneous tracheostomy. All 78 identifiable bacterial growths were Gram-negative, with *Pseudomonas aeruginosa* (38.5%) and *Klebsiella pneumoniae* (37.2%) predominating. The rest had either no growth or showed an overgrowth of upper respiratory commensals. Most isolates were sensitive to carbapenems (51%) and aminoglycosides (54%). Among the culture positive patients, 44% had ventilator-associated pneumonia, 27% had tracheobronchitis and 29% were colonizers.

Conclusion: Bacterial growth often complicate tracheostomy. The decision to treat with antibiotics should not depend upon culture results alone and must take into account clinical status of the patient as well.

Keywords: Tracheostomy, bacteriology, prolonged ventilation, *Pseudomonas*, colonization, pneumonia, tracheobronchitis

OP-No.: 81

How Infallible is Lung Injury Prediction Score in ARDS?

Authors – Dr Yashwanth Gunti, Dr N Bhaskara Rao

Background: Lung Injury Prediction Score (LIPS) score was generated for identifying those at high risk of developing acute respiratory distress syndrome (ARDS) early. This study analysis the value of LIPS in predicting ARDS and mortality among patients admitted in ICU by using 6 predisposing conditions and 9 risk modifiers.

Methods: It is a prospective observational study in 52 patients admitted in ICU due to respiratory failure both ventilated and nonventilated at GHCCD, Guntur. Patients with pneumonia and sepsis due to respiratory causes were considered for this study. This included both the direct and indirect causes. ARDS was defined using the Berlin criteria. Logistic regression models evaluated the ability of LIPS to predict development of ARDS.

Result: Fifty-two patients were observed out of which 22 developed ARDS and 30 did not. The average LIPS for patients who developed ARDS was 10.75 ± 2.35 . The patients who didn't develop ARDS have a mean LIPS score of 6.5.

Conclusion: LIPS has very high negative predictive value and good positive predictive value for predicting development of ARDS and mortality in patients presenting with respiratory failure. Initial assessment using the LIPS can assess the risk and early interventions can reduce the mortality due to ARDS in critically ill patients.

Keywords: Lung Injury Prediction Score, acute respiratory distress syndrome, ICU

OP-No.: 82

Factors Predicting Failure of CPAP in Obstructive Sleep Apnea Patients

Authors – Dr Challa Siva, Dr R Ramakrishna

Introduction: Continuous positive airway pressure (CPAP) is the most widely used therapy for obstructive sleep apnoea (OSA). Some patients with OSA do not respond to CPAP and for these patients, bilevel positive airway pressure (BiPAP) is the next level modality. This study tries to identify the predictors for CPAP failure among OSA patients.

Aim: To identify predictors for CPAP failure in OSA patients.

Methodology: The potential predictors were identified from a theoretical framework rooted in clinical examination, laboratory parameters, and polysomnographic variables pertaining to OSA patients. A prospective study was done in OSA patients diagnosed in our sleep laboratory from June 2022 to August 2023.

Inclusion Criteria: All OSA patients with age >18 years and diagnostic polysomnography showed apnea-hypopnea index (AHI) >15/hr.

Exclusion Criteria: Patients having psychiatric disturbances and underwent for brain surgeries, upper airway anatomical abnormalities, cardiac diseases and chronic obstructive pulmonary disease (COPD) patients.

Results: Total 62 patients, 13 members requires BiPAP (CPAP failure). The logistic regression consists of the following binary predictors – Age >60 years (odds ratio [OR] = 3.23 [1.27-8.23]), body mass index >35 kg/m² (OR = 4.25 [1.78-10.13]), forced expiratory volume <60% (OR = 7.33 [2.83-18.72]), neck circumference >47 cm (OR = 3.34), moderate-severe PAH (OR = 2.45), ESS score >16 (OR = 2.33), AHI >75 (OR = 4.31 [1.61-11.56]) and T90 >30% (OR = 6.67 [2.57-17.36]).

Conclusion: These 8 factors may aid to the clinical decision-making by predicting failure of CPAP and therefore may assist in more vigilant clinical care.

Keywords: BiPAP, CPAP, AHI, polysomnography

OP-No.: 83

Agreement Between Clinico-radiological and Histopathological Diagnosis in Interstitial Lung Disease

Authors – Dr Vivek N Vijay, Dr Sajitha M, Dr Venugopal P, Dr Venugopal KP, Dr John Sonia

Background: In interstitial lung disease (ILD) surgical lung biopsy is considered to be the gold standard. However, a multidisciplinary approach involving radiologist, pulmonologist and rheumatologist is considered equally good as surgical lung biopsy, but a significant number of cases may still remain as unclassifiable ILD even after multidisciplinary discussion and surgical lung biopsy is indicated in such patients.

Objectives: To determine the agreement between clinico-radiological and histopathological diagnosis in ILD patients with unclassifiable ILD, where a definitive diagnosis could not be reached after multidisciplinary discussion.

Methods: All patients with definitive diagnosis of ILD were subjected to history and examination findings, blood investigations, pulmonary function tests, high-resolution computed tomography imaging and a clinical diagnosis was arrived. Those patients with unclassifiable ILD even after multidisciplinary discussion were directed for a surgical lung biopsy. Those patients who were fit to undergo a surgical procedure was included in the study.

Results: It is a cross-sectional study with a duration of 18 months which included 196 ILD patients, 43 were unclassifiable ILD, from which 21 patients who were fit to undergo biopsy were included in the study of which 11 were males and 10 were females with mean age of 50.30 years with standard deviation of 15.58 years. Twelve patients underwent video-assisted thoracoscopic biopsy and 9 underwent transbronchial lung biopsy. After biopsy, a clear pathological diagnosis was made in 95.2% of the cases. Radiological and pathological diagnosis were similar in 57.14% of the cases. A treatment change after HPR was initiated in 47.62% of cases.

Conclusion: Surgical lung biopsy emerges as a valuable tool for achieving a clear pathological diagnosis in unclassified ILD, leading to treatment modifications.

Keywords: Interstitial lung disease, usual interstitial pneumonitis, idiopathic pulmonary fibrosis, surgical lung biopsy, diagnostic guidelines, nonspecific interstitial pneumonia

OP-No.: 84

Comparison of PEARL Score with ADO, BODEX for Prognosis and Prediction of 90 Days Readmission, Death's after Hospitalization with AECOPD

Authors – Dr PP Siva Ramakrishna, Professor Dr R Sunil Kumar, Dr Praveena

Background and Objectives: Acute exacerbation of chronic obstructive pulmonary disease (AECOPD) is the leading cause for emergency visits in hospitals, and 33% of patients are readmitted within 90 days. A simple and accurate prognostic tool is required to identify risk factors, improved prognosis and reduced mortality. PEARL score is compared with ADO and BODEX indices for prognosis and prediction of 90-day readmission or death after hospitalization for AECOPD.

Methods: A hospital-based observational study in 100 cases of AECOPD hospitalized at GHCCD, Andhra Medical College, Visakhapatnam. After inclusion and exclusion criteria, the patients underwent detailed clinical examination and investigations.

Results: My study showed the mean age of male was 65 years, and female was 60 years. The comparison of the means was statistically significant ($p = 0.0312$). Of 100 patients, 51 patients were not admitted, 29 patients were readmitted, and 20 patients died. Mean value of ADO index was 5.294 ± 1.221 , 6.480 ± 0.8710 , and 7.150 ± 0.9881 ; the mean value of BODEX index was 6.294 ± 1.238 , 7.759 ± 0.9876 , and 8.300 ± 0.6569 ; and the mean value of PEARL score was 1.569 ± 0.7281 , 4.034 ± 1.592 , and 5.850 ± 1.461 in not admitted, readmitted, and dead patients, respectively. The AUC is 0.6250 in PEARL score as compared with 0.5000 ADO and 0.500 BODEX index.

Conclusion: My study found PEARL score shows better prediction of 90-day readmission or death in AECOPD. PEARL score was found to be superior noninvasive to ADO and BODEX indices for prognosis of patients with AECOPD.

Keywords: AECOPD, PEARL score, reduce hospital mortality

OP-No.: 85

Level 1 Polysomnography vs. Level 3 Polygraphy plus Actigraphy on Clinical Decision-making in Obstructive Sleep Apnea Patients: An Interim Analysis

Authors – Dr Narayan Joshi, Dr Prakash Sivaramakrishnan, Dr Lokesh Kumar Saini

Background and Objectives: Level 1 polysomnography is the gold standard for diagnosis of obstructive sleep apnea (OSA). However, waiting time for Level 1 polysomnography (PSG) ranges from 6 months to 2 years in various cities. Level 3 study, due to accessibility and inexpensiveness, has increasing popularity for diagnosis of moderate to severe OSA. In this study, we aim to assess whether a combination of Level 3 PSG and actigraphy provides the same clinical decision-making as Level 1 PSG.

Methods: Forty-two subjects were included in this single center, analytical, cross-sectional study. Each subject underwent Level 1 PSG and actigraphy during same sitting. The total sleep time for Level 3+ actigraphy group was taken from actigraphy. Apnea, Hypopnea, Hypopnea with arousal (H/A) with 3% Desaturation H-D3 and actigraphy parameters were calculated and analyzed. Clinical decision was made based on Apnea-Hypopnea Index (AHI) and Respiratory Event Index (REI) and positive airway pressure (PAP) titration study, lifestyle modification or repeat study was chosen.

Results: Mean age of the subjects was 52 years and 52% ($n = 22$) were male. Among participants, mean AHI was 43.5 and REI was 42.6. Mean sleep time in Level 1 PSG and actigraphy were 7.76 and 8.23, respectively. We found that there was statistically significant difference between clinical decision-making between Level 1 and Level 3 PSG with actigraphy ($p = 0.0016$, $X^2 = 15.06$). However, on analyzing we found that only 1 participant was planned for different clinical decision between these two groups. A participant was advised for lifestyle modification as per REI but as per Level 1 PSG, PAP titration was planned.

Conclusion: The statistical difference in our study is not translating into benefit in the form of change in clinical decision likely due to less sample size and possible Berkson's bias as the participants undergoing PSG were symptomatic patients presenting to sleep clinic OPD.

Keywords: Level 3 polygraphy, actigraphy, OSA

OP-No.: 86

A Study on Malignant Pleural Effusion Cases with Special Emphasis on the Etiology, Risk Stratification and Therapeutic Outcome

Authors – Dr Ankita Chakraborty, Dr Somenath Kundu

Background and Objectives: Malignant pleural effusion is diverse in etiology, variable in prognosis and significant in mortality. This study aims to determine the etiology of malignant pleural effusion, to assess for risk stratification – by measuring the pleural fluid lactate dehydrogenase (LDH), Eastern Cooperative Oncology Group (ECOG) performance score – serum neutrophil-lymphocyte ratio (NLR) and tumor type (LENT score)—to study various therapeutic interventions utilized, as well as the outcomes of patients with a relationship to the LENT score.

Methods: Prospective observational study among adults with cytologically or histopathologically proven malignant pleural effusion – attending outdoor or indoor of Respiratory Medicine Department of IPGME&R, Kolkata from July 2022 to June 2023. This study involved clinical, radiological and cyto-histopathological data collection followed by prognostication through the LENT score. Post-treatment follow-ups were undertaken 1, 3, and 6 months or until death (whichever occurred earlier), and appropriate statistical analyses were applied.

Results: Lung cancer was the commonest cause (73.33%)—predominantly adenocarcinoma (90.9% of all lung cancers), which was followed by ovarian malignancy (15.56%). The LENT score and overall survival had a negative near linear correlation ($r = -0.78$). It was noted that all patients undergoing thorascopic pleural biopsy (38.64%) did not experience recurrence of effusion.

Conclusion: Lung cancer is the most common cause of malignant pleural effusion and the LENT score provides prognostic data.

Keywords: Malignant pleural effusion, etiology, LENT score, therapeutic outcome

OP-No.: 87

The Usefulness of Neutrophil-to-Lymphocyte Ratio and Platelet-to-Lymphocyte Ratio to Assess Severity of Pulmonary Tuberculosis: A Retrospective Study

Authors – Dr Prerna Galhotra, Dr Shrinath V, Mrs Samruddhi Deshpande, Dr IM Pandey, Dr T Ajai Kumar, Dr Manu Chopra, Dr Rahul Tyagi, Dr Aseem Yadav, Dr Kislav Kishore, Dr Jyothis MC

Background and Objectives: Neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) are markers for worse prognosis for COVID-19 infections,¹ obstructive sleep apnea,² chronic obstructive pulmonary diseases,³ idiopathic pulmonary fibrosis⁴ and pneumonia.⁵ In India, pulmonary tuberculosis has a significant burden of infection and disease. In this study, we intend to find the usefulness of NLR and PLR as a marker of the severity of “The Captain of All These Men of Death.”

Methods: In this retrospective record-based study, conducted on diagnosed patients of pulmonary tuberculosis, who underwent treatment at a tertiary care hospital in Western Maharashtra, we first confirmed the association of radiological severity (involvement of more than two zones in one lung or at least one zone each in both lung fields) and sputum smear positivity as an index of severe pulmonary tuberculosis disease, and thereafter the association of NLR (≥ 7) and PLR (≥ 213.732)⁶ with severe pulmonary tuberculosis was inferred using Chi-square test at 95% CI.

Results: After screening medical records of 550 patients, 210 patients were included and the remaining 340 were excluded due to incomplete medical records. Of the 210 patients, 104 were sputum smear positive for acid-fast bacilli while 106 were negative. Eighty-five patients had radiologically severe disease and the remaining 125 were nonsevere. The NLR was ≥ 7 in 19 patients while it was < 7 in 191 patients. Also, the PLR was more than 213.732 in only 36 patients.

Conclusion: There was neither significant statistical association between radiological severity and severity based on the NLR (p value 0.2577), nor between sputum smear positivity and raised value of NLR (p value 0.1970). Also, contrary to the studies available, no correlation was found between PLR and radiologically severe disease (p value 0.413) or between PLR and sputum positivity (p value 0.066).

Keywords: Neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio, pulmonary tuberculosis

References: ¹Koval D, Konopkina L, Bieloslutseva K, Krykhtina M. Platelet to lymphocyte ratio (as a predictor of COVID-19 pneumonia progression). ²Koseoglu S, Ozcan KM, Ikinciogullari A, Cetin MA, Yildirim E, Dere H. Relationship Between Neutrophil to Lymphocyte Ratio, Platelet to Lymphocyte Ratio and Obstructive Sleep Apnea Syndrome. *Advances in Clinical and Experimental Medicine: Official Organ Wroclaw Medical University*. 2015 Jul 1;24(4):623-7. ³Pascual Gonzalez Y, Lopez Sanchez M, Dorca J, Santos S. Defining the role of neutrophil to lymphocyte ratio in COPD: a systematic literature review. *International Journal of Chronic Obstructive Pulmonary Disease*. 2018 Nov 5:3651-62. ⁴Zinellu A, Paliogiannis P, Sotgiu E, Mellino S, Mangoni AA, Zinellu E, et al. Blood cell count derived inflammation indexes in patients with idiopathic pulmonary fibrosis. *Lung*. 2020 Oct;198:821-7. ⁵Kartal O, Kartal AT. Value of neutrophil to lymphocyte and platelet to lymphocyte ratios in pneumonia. *Bratislavské lekárske listy*. 2017 Jan 1;118(9):513-6. ⁶Yu Q, Luo H, Hu S, Sun D, Nie Q, Yan J. The survival analysis of rifampicin/multidrug resistant tuberculosis patients based on the levels of inflammatory biomarkers: a retrospective cohort study. *Frontiers in Cellular and Infection Microbiology*. 2023 May 1;13:460.

OP-No.: 88

Effect of Methylcobalamin on PFT of People with COPD and Diabetes

Author – Dr Sanjay Sud

Background and Objectives: It is well known that diabetic neuropathy causes multiple complications. Its deleterious effect on pulmonary function is well established. This observational study was done in those suffering from chronic obstructive pulmonary disease (COPD), type 2 diabetes mellitus (T2DM) and neuropathy. Data of 60 people with diabetes and COPD were gathered. Inclusion criteria – Nonpregnant adults, T2DM ≥ 2 years, HbA1c $\leq 7.5\%$, diagnosed COPD Stage 1 or 2 (As per GOLD criteria) along with neuropathy. Exclusion criteria – Age > 80 years, COPD with GOLD 3 or 4, HbA1c $> 7.5\%$, LVEF $\leq 40\%$ and those with pulmonary malignancy. All those included were receiving standard medical care for T2DM and inhalation therapy (ICS + LABA \pm Anticholinergics) as DPI or MDI.

All those included were followed up for 6 months, with a second visit after 3 months after the first. They were divided into two groups A and B. Those in Group A were given 1500 ug of methylcobalamin per day and those in Group B were given 500 ug of methylcobalamin per day (orally). The objective was to find out if methylcobalamin supplementation made any difference in improving the pulmonary function in patients of COPD with T2DM and neuropathy.

Methods: Pulmonary function tests (PFTs) was done on first and third visit. The changes in FEV1 were recorded and compared in both the groups. FBS, PPBS and HbA1c were done on all the three visits. Out of the 60 people included, 7 did not complete the scheduled visits, and 3 people had HbA1c $> 7.5\%$ on subsequent visits, so their data was not analyzed. Of the 50 people completing the study – 38 were males and 12 females.

Conclusions: The results showed greater improvements in the PFT in Group A (FEV1 increase by a mean of 20%) in comparison to Group B (FEV1 increase by a mean of 8%).

Keywords: T2DM, COPD, PFT, methylcobalamin and neuropathy

OP-No.: 89

FeNO with IOS and Spirometry – An Improved Diagnostic Tool

Authors – Dr Rajat Kumar Mishra, Dr Anil Kumar Singh, Dr Alok Srivastava, Dr Huda Shamim, Dr Dipin S

Background: Impulse oscillometry (IOS) is a variant of forced oscillation technique. IOS parameters seem to be able to pick up early changes in lung function such that when combined with spirometry can potentially identify disease early. Fractional exhaled nitric oxide (FeNO) is a quantitative, noninvasive, simple and safe method of measuring airway inflammation in asthma. Our aim is to compare the ability of FeNO to predict airway inflammation in clinically suspected cases of bronchial asthma and to understand the relation of FeNO with spirometry and IOS.

Methods: Eighty-nine consecutive patients of clinically suspected bronchial asthma were advised to undergo spirometry, impulse oscillometry and FeNo testing. Variables like FEV1, R5, X5 and FeNO were measured in all patients and were compared.

Results: Out of 89 patients (48% male/52% female) of clinically suspected asthma 31 (34%) had an abnormal FeNO (≥ 25 ppb), 44 (48%) had abnormal spirometry and 55 (61%) had abnormal IOS. All three parameters were abnormal in 16 (29%) patients. Among 24 patients with normal spirometry and normal IOS 4 (4%) patients had raised FeNO. Both spirometry and IOS was abnormal in 35 (39%) but with varying distribution in severity.

Conclusion: FeNO is an excellent tool in identifying airway inflammation and can potentially identify early cases of bronchial asthma if combined with IOS and spirometry. IOS parameters are more sensitive to identify patients with asthma and to exclude those without asthma than the parameters of spirometry.

Keywords: Impulse oscillometry, FeNO, spirometry, asthma

OP-No.: 90

Prevalence of Fungal Sensitization in Newly Diagnosed and Follow-up Asthma Patients in a Tertiary Care Teaching Hospital

Author – Dr Leon Vinoth Kumar J

Background: Poor asthma control and a higher risk of more serious illness and consequences are linked to fungal sensitization and uncontrolled fungal infections. According to Denning et al, 4.8 million individuals are thought to have allergic bronchopulmonary aspergillosis (ABPA). Up to 50% of adult asthmatics in secondary care hospitals have fungal sensitization and over 6.5 million people have severe asthma with fungal sensitization (SAFS). The aim of our study was to determine the prevalence of fungal sensitization and the degree of asthma control in patients presenting to a tertiary care hospital.

Methodology: All the new and follow-up asthma patients (Diagnosed as per GINA guidelines 2022) in Respiratory Medicine OPD were subjected to allergic skin prick test with common fungal antigens in a prospective study. A skin test with a wheal size of $\geq 3 \times 3$ mm was considered to be positive. Follow-up asthma control among the subjects were assessed based on ACQ/ACT retrospectively via telephonic calls.

Results: Among 383 asthmatics recruited in the study, 71.8% (268) had fungal sensitization. Of the total, *Aspergillus fumigatus* accounted for 37.9% followed by *Fusarium solani* (32.3%), *Helminthosporium sativum* (31.7%), *Penicillium* (30.4%), *Rhizopus nigricans* (30.1%), *Curvularia lunata* (25%) and *Alternaria taenioides* (21%), respectively. Asthma patients who underwent follow-up were divided into three groups: 48.2% had excellent asthma control, of which 45.7% had fungal sensitization, 42.6% had partial asthma control with 42.9% fungal sensitization and 9.2% had poor asthma control with 11.4% of fungal sensitization.

Conclusion: Our findings suggested that the prevalence of fungal sensitization in asthmatics to at least one fungal antigen was 71.8% with *A. fumigatus* being the most common. This indicated that asthmatics had a significant prevalence of fungal sensitization. But only 9.2% of people had poor asthma control, pointing to the ambiguity of the fungal antigen's relationship to asthma control.

Keywords: Allergic bronchopulmonary aspergillosis, fungal sensitization, aspergillus fumigatus, asthma

OP-No.: 91

Aeroallergen Sensitivity Pattern among Patients with Nasobronchial Allergy and its Association with Disease Severity: A Cross-Sectional Study

Author – Dr Athulya S

Background and Objectives: Sensitization patterns to inhaled aeroallergens vary in asthmatics across geographic regions and may affect disease severity. Knowledge of contemporary allergen sensitivity patterns in patients with severe asthma is vital to the practicing clinician. Sensitization to certain allergens have been associated with severe disease. The primary objective is to describe the sensitivity pattern to common aeroallergens in patients with asthma. The secondary objective is to evaluate the association between specific aeroallergen sensitivity and severity of airflow limitation and to evaluate the exacerbation rates in patients sensitized to specific aeroallergens.

Methods: This was a single-center cross-sectional study in patients with asthma and persistent airflow limitation evaluated with a skin prick test for aeroallergen sensitivity. Descriptive data was collected and presented with regard to the percentage of aeroallergen sensitization. The relation between the specific agent sensitivity and the severity of airflow obstruction was assessed by Chi-square test. The exacerbation rate in asthmatics with specific aeroallergen sensitivity was also tested by Chi-square test.

Results: Seventy-six patients with bronchial asthma and persistent airflow limitation were evaluated by skin prick test, 46 of whom also had concomitant allergic rhinitis. The study population exhibited a high sensitivity to aeroallergens; all subjects were sensitized to at least one allergen. Multiple aeroallergen sensitivity was commonly noted, and the agents with a high percentage of positivity included house dust mites, cockroaches, house dust, and dog dander (positive in 90%, 83.3%, 73.3%, and 64.3%, respectively). Sensitization to house dust ($p = 0.022$), *Aspergillus niger* ($p = 0.003$), *Aspergillus fumigatus* ($p = 0.029$) and pigeon feather ($p = 0.026$) were associated with severe airflow obstruction and severe asthma. The exacerbation rate in patients sensitized to these agents was statistically higher than those without.

Conclusions: Multiple aeroallergen sensitivity was noted in asthmatics in the present study. Sensitization to house dust, *Aspergillus* species and pigeon feather were associated with severe airflow limitation. Exacerbation rate in subjects sensitised with *Aspergillus* and pigeon feather was higher.

Keywords: Severe asthma, aeroallergen sensitization, exacerbation rate

OP-No.: 92

Mortality Trends in Rural Southern Indian Population: Insights from Biomass and Smoking Exposure – MUDHRA Cohort Study

Authors – Dr Greeshma MV, Dr Ashwaghosha Parthasarathi, Dr Lokesh KS, Dr Chaya SK, Dr Jayaraj Biligere Siddaiah, Dr Padukudru Anand Mahesh

Background and objectives: Exposure to biomass and smoking has been associated with the increased morbidity and mortality. There is a need for evidence from the cohort studies with a longitudinal follow-up on important risk factors such as biomass smoke exposure is needed, especially in the low air pollution regions like Mysuru situated in the southern part of India. We investigated the associations between the long-term exposure to biomass, smoking and mortality in a prospective cohort over 17 years.

Methods: We studied 8,457 subjects aged between 30 years and 80 years, who were screened for symptoms for chronic respiratory disease during 2006-2009. The Mysuru stUdies of Determinants of Health of Rural Adults (MUDHRA) cohort is the single largest representative of rural population in southern India. Later in 2019 before COVID-19, we visited all the subjects to identify all-cause mortality and administered the verbal autopsy questionnaire as well as the cause of death was identified from medical records.

Results: The prospective study of 8,457 subjects' (males: 4,504, females: 3,953) reveals that 26.8% are smokers, 46.6% are biomass exposed. The common respiratory symptoms were cough with phlegm (1,077) or without phlegm (335), followed by dyspnea (147). Over a period of 17 years, subjects who did not have any respiratory symptoms had a mortality of 3.2%, among those with cough alone 0.54%, cough with phlegm 0.26%, and dyspnea 0.08%. Among those who smoke, the mortality rates were 3.7%, light smokers 0.26% and heavy smokers 3.5%. Among those who use biomass regularly for cooking, the mortality rates were 4.7%.

Conclusion: Subjects with both the symptoms and the risk factors carried a significantly higher risk of mortality as compared to subjects without symptoms or risk factors and also subjects who are exposed to biomass significantly higher risk of mortality as compared to smokers.

Keywords: Biomass smoke exposure, smoking, longitudinal study, MUDHRA cohort study, mortality

OP-No.: 93

Factors Associated with Failure of Noninvasive Ventilation in Chronic Obstructive Pulmonary Disease with Type 2 Respiratory Failure

Authors – Dr Maliakal Mala MK Avarachan, Dr Muraly CP, Dr Thomas George, Dr Sanjeev Nair, Dr Elizabeth Mathai, Dr Anitha Thilakan, Dr Arjun Chandran

Background and Objectives: Worldwide the third leading cause of death is chronic obstructive pulmonary disease (COPD). Noninvasive ventilation is the mainstay of management of type 2 respiratory failure, but noninvasive ventilation (NIV) failure rates range from 15% to 24%. Early identification of patients who would not benefit from NIV may reduce mortality. Hence, this study was taken up with the objectives to determine the factors associated with the failure of NIV in COPD with type 2 respiratory failure.

Methods: This study included patients with COPD in type 2 respiratory failure at a tertiary care center. Failure was defined as deterioration of patient's condition, worsening of respiratory acidosis leading to intubation, in-hospital mortality, and success as weaning off from NIV. The demographics, ABG, investigations, duration of NIV and the outcome were collected with the aid of a structured proforma and analyzed using Epi Info 7.2.4.0.

Results: Mean age of patients was 68.44 ± 7.21 . Mean initial Glasgow Coma Scale (GCS) in those with NIV failure was 11.5 ± 2.88 and success was 14.16 ± 1.94 , the difference being statistically significant ($p = 0.003$). Mean of GCS at first hour in NIV failure was 9.83 ± 3.48 and success was 14.75 ± 2.3 , the difference being statistically significant ($p = 0.002$). Mean PCO_2 at first hour in NIV failure was 107.02 ± 13.95 and in success was 79.54 ± 17.63 , the difference being statistically significant ($p = 0.004$). ROC curve was plotted and best cut off determined by using YUDEN method for GCS at the beginning and at first hour for predicting failure as 12. Failure rate was 66.7% in those with GCS below 12 and 16.7% in those above 12. Similarly, for PCO_2 at first hour, the best cut-off was 95.3 mmHg, failure rate being 71.4% in those above 95.3 mmHg, and 16.7% in those below. Other factors were not statistically significant.

Conclusions: This study showed that initial GCS and that at first hour, PCO_2 at first hour could predict failure of NIV.

Keywords: Noninvasive ventilation, COPD, respiratory failure

OP-No.: 94

Metabolic and Cardiovascular Complications in Obstructive Sleep Apnea Patients: A Descriptive Study

Authors – Dr Ayush Jain, Dr Alkesh Kumar Khurana, Dr Abhijit P Pakhre, Dr Abhishek Goyal

Background and Objectives: Long-term follow-up data of obstructive sleep apnea (OSA) patients is not available from India. This study was conducted in laboratory-diagnosed patients with moderate-severe OSA to determine their survival, QOL, CPAP compliance, and the metabolic, cardiovascular and neurocognitive parameters.

Methods: Patients in the sleep registry of AIIMS Bhopal were called for follow-up. Questionnaires like QOL (Fatigue Severity Scale), Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), and depression scale Patient Health Questionnaire (PHQ-9) were filled. CPAP usage was objectively assessed from the device's SD card. Physical examination (BP, anthropometry), hemoglobin, lipid profile, HbA1c and insulin resistance were measured.

Results: Out of the total 672 patients; 229 could not be contacted; 178 patients refused follow-up; and 47 died. Thus, data was collected for 218 patients with the median follow-up duration of 5 years. The mortality rate was 15.22 per thousand years in <60 years and 69.04 per thousand years in ≥60 years of age – which is 5 times and 1.5 times the mortality rate in the respective age groups among Indian populations. Predictors of mortality in multivariable analysis, the mortality predictors were age, obstructive airway diseases and T95 ($p < 0.001$, 0.031 and 0.002, respectively). On comparing the baseline and follow-up characteristics for CPAP users and non-users significant differences were observed in nocturia (2.3 times/night to 1.2 times/night, $p < 0.001$) and ESS (9.6 to 5.9, $p < 0.001$). There was significant improvement in accidents, near-accidents and morning headaches among CPAP users ($p < 0.001$). The overall CPAP compliance was 47.5%. The most important reason for noncompliance was financial constraints (30%). Higher BMI, T90 and waist circumference were significantly associated with insulin resistance.

Conclusion: In this first of its kind, Indian study, we found that OSA leads to significantly high mortality in Indians and should be recognized as a major public health problem. Ample emphasis on its emphasizing its early diagnosis and treatment to avoid developing other systemic complications. CPAP usage in OSA patients is limited due to the financial constraints in Indian settings.

Keywords: OSA, CPAP, cardiovascular, metabolic, compliance

OP-No.: 95

Clinico-radiological, Laboratory and Functional Profile of Chronic Pulmonary Aspergillosis Patients Treated at a Tertiary Care Center in Western Maharashtra: A Prospective Study

Authors – Dr Jyothis MC, Dr Shrinath V, Dr Vikas Marwah, Dr Indramani Pandey, Dr T.Ajai Kumar, Dr Manu Chopra, Dr Rahul Tyagi, Dr Kishore, Dr Aseem Yadav

Background: Chronic pulmonary aspergillosis (CPA) is the chronic infection of the pulmonary parenchyma by *Aspergillus* species. Despite estimated studies showing a high prevalence of CPA in India, data on CPA from different geographical regions and ethnic groups are lacking.

Objective and Method: A prospective study conducted on patients diagnosed with CPA attending the Respiratory OPD of a tertiary care hospital in western Maharashtra. Initial analysis was done based on the clinical profile, radiological findings, laboratory values including serum *Aspergillus* specific IgG, sputum staining and cultures, and functional evaluation by spirometry. These patients were given oral triazole (Itraconazole/Voriconazole) or surgical management depending on the clinical profile. Patients were followed up monthly and re-assessed again at the end of 6 months with all the parameters.

Results: Thirty-four subjects (Male:female = 1:1), mean age of 53.3(± 16.31) years with CPA were included. The mean duration of symptoms on diagnosis was 1.5 (± 2.25) years. Chronic cough (n = 32, 94.11%) was the most common symptom. The most common underlying disease was post tuberculosis bronchiectasis (47%, n = 16). The most common radiological finding on CT thorax was the presence of cavities with internal content (n = 19, 57%). The mean *Aspergillus fumigatus*-specific IgG at baseline was 73.13 (± 41.62) mgA/L which decreased to 39.65 (± 23.15) mgA/L at the end of 6 months of therapy. The overall response rate to both surgery and oral antifungal was 85.29% after 6 months of treatment. There was no significant improvement in lung function after 6 months of therapy.

Conclusion: CPA should be ruled out in any patients with underlying lung disease having persistent symptoms and radiological worsening. Surgical management and oral triazole give symptomatic improvement. A standardized protocol should be in place for monitoring treatment response. Weight gain and resolution of symptoms are markers for treatment response.

Keywords: Chronic pulmonary aspergillosis, clinical profile, radiological features

OP-No.: 96

Accuracy of the CAPTURE Questionnaire in Population Screening for COPD

Authors – Dr Dhara Thakrar, Dr Lancelot Pinto, Dr Ashwini Chawhan

Background and Objectives: Chronic obstructive pulmonary disease (COPD) is the third leading cause of mortality worldwide, and is often undiagnosed, especially in low- and middle-income nations. CAPTURE (COPD Assessment in Primary Care To Identify Undiagnosed Respiratory Disease and Exacerbation Risk) is a short, five-item screening questionnaire developed to screen patients for symptomatic COPD in primary care. Its accuracy at community screening has not been determined. Our objective was to determine the accuracy of CAPTURE in identifying symptomatic subjects with COPD at a health screening.

Methods: Consecutive subjects ≥ 18 years of age with no diagnosed respiratory illness undergoing spirometry as a part of health screening were enrolled. Consenting subjects were requested to complete the CAPTURE questionnaire. COPD was diagnosed based on a fixed FEV1/FVC ratio < 0.7 , and classified based on the GOLD classification. A score ≥ 2 was considered abnormal for the questionnaire. We aimed to determine the accuracy of CAPTURE questionnaire at identifying undiagnosed clinically significant COPD.

Results: From November 2022 to Feb 2023, 1453 individuals were screened. Mean age was 52 years (SD = 12) with 60% males. Fifty-one (3.51%) were diagnosed to have COPD by spirometry criteria (28, 28 and 3 subjects in GOLD stage 1, 2 and 3, respectively). The CAPTURE questionnaire had an excellent negative predictive value for COPD (97.8%, CI 96.8, 98.6). Sixteen of the 24 individuals with COPD not screened by the questionnaire had GOLD 1 COPD, suggesting that a majority of those with moderate to severe COPD were screened.

Conclusion: The CAPTURE is an easy-to-use accurate questionnaire which can be deployed in screening individuals in the community for the early detection of COPD.

Keywords: Capture, COPD, screening

OP-No.: 97

Melioidosis: A New Emerging Infection in West Coastal Maharashtra

Authors – Dr Preetham Napa, Dr Ajit Kulkarni, Dr Ajay Keni, Dr Sumedh Lokapure

Background and Objectives: Melioidosis is a zoonotic infectious disease caused by a Gram-negative bacterium *Burkholderia pseudomallei*. It is an endemic disease in Southeast Asia and Northern Australia, but under reported from India. This study was conducted to determine the geographical epidemiology, risk factors, clinical presentations associated with melioidosis.

Methods: It is retrospective study of six culture proven cases of melioidosis from a tertiary care hospital.

Results: The six cases of melioidosis were from same geographical location from western coast of Maharashtra. The age group ranged from 3 years to 55 years but more predominant group was within 30- to 50-years. All were males (100%), no female patient was affected. Majority of cases were presented to the hospital in rainy season, from June to September, coincides with season of heavy rainfall. Alcoholism (83.33%) and diabetes mellitus (66.66%) were major risk factors involved. Fever (100%) was most common presenting symptoms. The organ space abscess (50%) involving lymph node, liver and spleen were common followed by disseminated disease and pulmonary melioidosis. All patients were treated with β -lactam antibiotics as intensive therapy followed by oral co-trimoxazole as eradication therapy.

Conclusion: Melioidosis is an emerging infection in India specially in the coastal region with very heavy rainfalls. Male gender is prone to develop the infection with diabetes and alcoholism are additional risk factors. The clinical presentation may vary from localized organ space abscess to septic shock with high mortality. The accurate diagnosis and prompt treatment play key role in managing melioidosis.

Keywords: Melioidosis, alcoholism, diabetes mellitus

OP-No.: 98

Allergen Sensitivity Pattern and its Correlation with Total IgE Levels and Eosinophil Count among Patients with Allergic Rhinitis and/or Asthma in North Karnataka

Authors – Dr Pranavi V, Dr B Likhitha

Background and Objectives: Respiratory allergy is common among all populations. Skin prick testing remains to be the gold standard, but several factors make the test less preferred. Hence, total serum IgE levels and eosinophil counts are preferred. To determine allergen sensitivity patterns among the patients with allergic rhinitis and/or asthma. To correlate the skin prick test reactivity with total serum IgE levels and eosinophil counts, so as to determine the possibility of their use as a screening test.

Methods: Cross-sectional study on patients with the diagnosis of allergic rhinitis and/or asthma. Allergen skin prick test was done in each patient, and total serum IgE levels and eosinophil counts were measured.

Results: Majority of the patients had only allergic rhinitis (38.6%), compared to those with only asthma (27.3%) and both allergic rhinitis and asthma (34.1%). The most common allergen was Blomia (House dust mite) (50%) and the least common were honey bee and lemon (2.3%). The correlation between total serum IgE levels and absolute eosinophil counts was significant ($p < 0.05$). There was a statistically significant correlation between total serum IgE levels as well as eosinophil counts with the number of allergens, the patients were sensitized to.

Conclusion: Blomia (House dust mite) is the common offending allergen in the patients of respiratory allergy in North Karnataka. Total serum IgE levels and absolute eosinophil counts could be helpful in identifying the extent of allergen sensitivity, although skin prick test remains the gold standard test.

Keywords: Skin prick test, allergen sensitivity, total IgE, eosinophil counts

OP-No.: 99

Feasibility of home-based pulmonary rehabilitation for individuals with idiopathic pulmonary fibrosis in Delhi, India

Authors – Humaira Hanif, Obaidullah Ahmed, James Manifold, Mohd Shibli, Amy Barradell, Zahira Ahmed, Dom Malcolm, Andy Barton, Deepak Talwar, Sally J Singh, Mark W Orme

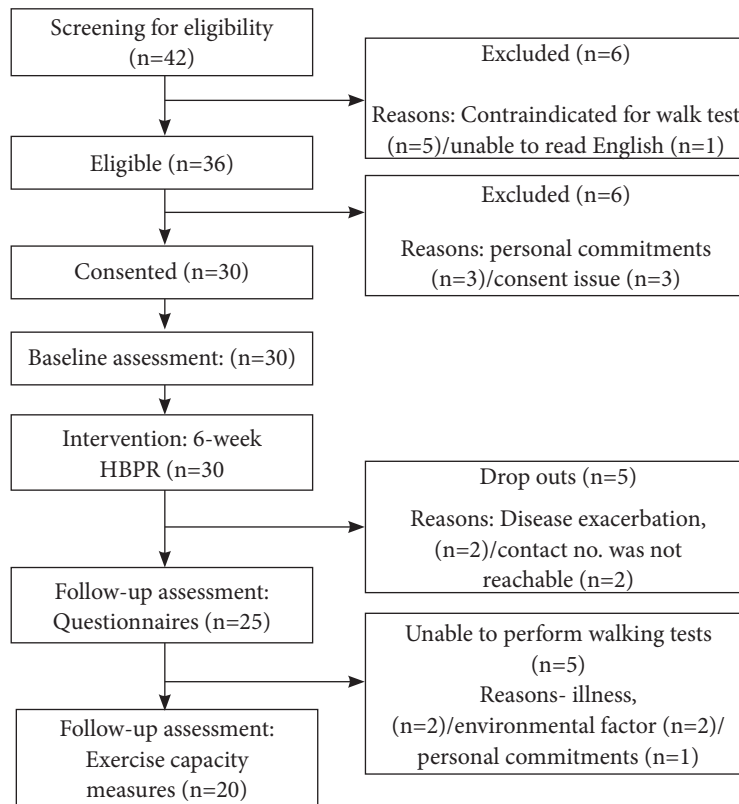
Background and Objectives: Pulmonary rehabilitation (PR) is recommended for individuals with idiopathic pulmonary fibrosis (IPF). Limited access and barriers such as distance, dependency, and cost associated with centre-based PR in India supports the development of appropriate home-based PR (HBPR) as an additional option for services. The objective of the study was to assess the feasibility of HBPR for individuals with IPF.

Methods: 30 individuals with IPF were recruited to a 6-week protocol of HBPR using paper-based manual for IPF, adapted from the Self-monitoring Programme of Activity Coping and Education (SPACE for COPD©) developed in the UK (Mitchell KE et al, 2014). The primary outcome was feasibility (classified by $\geq 60\%$ of eligible patients recruited and $\geq 70\%$ of recruited patients completing the follow-up assessment). Secondary outcomes included dyspnoea (MRC score), ILD-specific health-related quality of life (KBILD score) and exercise capacity (incremental and endurance shuttle walk tests [ISWT and ESWT]).

Result: Out of 42 screened patients, 36 were eligible (86% of screened), 30 were recruited (83% of eligible), and 25 completed their follow-up assessment (83% of recruited; Figure-1). Main reason for ineligibility: contraindicated to walking tests ($n=5$). Main reason for declining participation: personal commitments ($n=3$). Of the 30 participants, 5 withdrew due to disease exacerbation ($n=2$) or being uncontactable ($n=3$). Of the 25 completers, 5 participants completed their follow-up visit by telephone (rather than face-to-face) due to illness ($n=2$), environmental factor ($n=2$) or personal commitments ($n=1$). Following HBPR, MRC score changed from 3.4 ± 1.1 to 2.1 ± 0.8 , KBILD total score from 54.7 ± 16.5 to 78.2 ± 12.0 , ISWT distance from 268.5 ± 116.0 to 321.0 ± 116.4 m, and ESWT time from 272.2 ± 122.9 to 392.8 ± 87.2 s.

Conclusion: HBPR for people living with IPF in Delhi exceeded our predetermined feasibility criteria. HBPR may be an acceptable choice of PR to improve uptake and completion, warranting further research.

Figure 1: Flow of participants through the trial.



OP-No.: 100

Role of Pleural Fluid Neutrophil to Lymphocyte Ratio in the Evaluation of Pleural Effusion

Authors – Dr V.Likhitha, Dr. M.G.Krishna Murthy, Dr. G.Ramulu, Dr. V.Gopikrishna

Background: Pleural effusion is a common diagnostic and clinical condition caused due to various diseases. It can be transudative or exudative type. Most common causes of pleural effusion are Tuberculosis, followed by malignancy, pyogenic, and transudative effusion. Pleural fluid analysis includes various biochemical, microbiological, and pathological parameters. In our study, we aim to evaluate the role of pleural fluid neutrophil to lymphocyte ratio to diagnose and correlate among different types of pleural effusion.

Objectives:

1. To measure the pleural fluid neutrophil to lymphocyte ratio in different types of pleural effusion.
2. To assess the role of pleural fluid neutrophil to lymphocyte ratio among exudative and transudative pleural effusions.
3. To compare the pleural fluid neutrophil to lymphocyte ratio in between transudative and exudative pleural effusion.

Methods: An observational crosssectional study conducted in 100 patients with pleural effusion, and pleural fluid analysis was done and pleural fluid neutrophil, lymphocyte count was done in Neubauer's counting chamber through electron microscope. And from that pleural fluid differential cellcount, neutrophil to lymphocyte ratio was calculated and compared among different types of pleural effusions.

Results: A notable proportion of the analyzed cases were identified with Tubercular pleural effusion. These particular cases consistently showed elevated levels of LN ratio. This specific ratio has been observed to offer impressive diagnostic accuracy. In fact, the LN ratio demonstrated a sensitivity and specificity exceeding 90%.

Conclusion: Calculation of pleural fluid NLR may have a role in differentiating transudative and exudative effusions and in between exudative effusions too.

Keywords: NL ratio , Transudative, Exudative effusion.

Oral Papers: ICS Award

OP-No.: 25

Role of Thoracic Ultrasound in Ruling Out Pneumothorax in Patients after Bronchoscopic Transbronchial Lung Biopsy – A Retrospective Study

Authors – Dr Prince James, Dr Priyadarshini S

Background and Objectives: Pneumothorax is a well known complication of bronchoscopic transbronchial biopsy (TBLB) procedure. It's a standard practice to do a chest X-ray after TBLB to rule out pneumothorax before discharging the patient. However, research trials show thoracic ultrasound (TUS) has a high diagnostic accuracy to rule out pneumothorax. Thus, a bedside TUS in bronchoscopy room can be used to rule out pneumothorax in post-TBLB patients. This study aims to evaluate the sensitivity, specificity, PPV, NPV of TUS in comparison to chest X-ray for detecting pneumothorax in post TBLB patients.

Methods: This is a retrospective single-center study conducted at Interventional Pulmonology Department of Naruvi Hospitals - Vellore, Tamil Nadu, from April 2021 to August 2023. It included patients who have undergone bronchoscopic TBLB procedure and had a post procedure TUS and chest X-ray. Pneumothorax was diagnosed in TUS based on the findings such as absence of lung sliding or lung pulse and B lines and the presence of lung point in B mode or stratosphere sign in M-mode.

Results: Total 263 patients underwent bronchoscopy during this 28 months period and out of them 119 patients had TBLB. Two hours post procedure chest X-ray showed pneumothorax in 4 cases (3.3%). Two out of these 4 patients were diagnosed to have pneumothorax in immediate post procedure TUS. All of these 4 patients required chest tube drainage for management of pneumothorax. The sensitivity, specificity, positive predictive value, negative predictive value and diagnostic accuracy of TUS for post-TBLB pneumothorax were 80%, 100%, 100%, 99.14% and 99.17%, respectively.

Conclusion: TUS has very high diagnostic accuracy to rule out pneumothorax in post-TBLB patients. This approach can save a lot of time and cost spend, while doing an X-ray chest for the same purpose.

Keywords: Thoracic ultrasound, pneumothorax, TBLB

OP-No.: 26

Prevalence of OSA in Acute Myocardial Infarction Patients as Assessed by STOP-BANG Score

Authors – Dr Deepa Maria Jose, Dr Arshiya Rashid, Dr Davis Paul, Dr Jayakumar TG, Dr Krishnakumar EV, Dr Arun NA

Background and Objectives: Obstructive sleep apnea (OSA) is a risk factor for hypertension and coronary artery disease (CAD). Several studies have shown significant association with acute myocardial infarction (MI) and OSA. STOP-BANG score is an easy and reliable OSA screening test. This study aims to find out prevalence of OSA among acute MI patients using STOP-BANG score.

Methods: Eligible patients presenting as acute MI for the first time were included. Patients were assessed using STOP-BANG questionnaire and grouped for risk of OSA as low (score 0-2), moderate (score 3-4) and high (score ≥ 5). Comorbidities assessed were hypertension (HTN), dyslipidemia, diabetes (DM), CAD, obstructive airway disease (OAD), chronic kidney disease (CKD), gastroesophageal reflux disease (GERD).

Results: Among 51 acute MI patients, 71% (n = 36) were males and mean age was 62.67 ± 13.5 years. STOP-BANG score showed 23.5% (n = 12) had high, 49% (25) had moderate, and 27.5% (14) had low risks of OSA. About 72.5% (n = 37) had STOP-BANG score ≥ 3 (moderate - high-risk of OSA). In high risk OSA group the proportion of HTN was 32.4%, DM - 34.5% and OAD - 42.9%. Multivariate logistic regression analysis showed, adjusted odds for developing OSA is 15.67 times more likely for hypertensive patients ($p < 0.05$), 14.41 for diabetics ($p < 0.05$) and 8.51 for OAD. Sixty percent (n = 34) of acute MI patients had HTN, with 82% in the moderate-high risk group. Fourteen MI patients had OAD, of which 92.9% (13) had STOP-BANG score > 3 .

Conclusion: The prevalence of OSA as assessed by STOP-BANG score was high and should be considered as a risk factor for MI.

Keywords: Obstructive sleep apnea, acute MI, STOP-BANG score

OP-No.: 27

Comparative Study of Patients Attending Respiratory Clinics with Mild Respiratory Symptoms with Normal Spirometry versus Abnormal Impulse Oscillometry

Author – Dr Sabahath Nazia

Background: Spirometry is used to measure the rate at which lung changes volume during forced breathing maneuvers. Impulse oscillometry (IOS) is an effort independent test performed with tidal breathing which can ascertain the presence of small airways dysfunction by measuring the heterogeneity of resistance between 5 Hz and 20 Hz (R5-R20) or the area under the reactance curve (AX). The aim of the study is to study the sensitivity of IOS in diagnosis of undiagnosed airway disorders.

Method: Sixty-one patients with mild respiratory symptoms like cough, cold and shortness of breath visiting clinic in Chalmeda Anand Rao Institute of Medical Sciences were included. Sixty-one patients were subjected to perform both spirometry and IOS. It's a prospective study.

Result: All spirometric parameters (FVC, FEV1, FEV1/FVC) and IOS parameters (R5, R20, X5) were studied. Among the 61 patients subjected to spirometry and IOS, spirometry diagnosed 47.5% cases to be normal compared to IOS in which 26.22% were normal. IOS could diagnose 73.77% cases with both obstructive and restrictive pattern when compared to spirometry, which could diagnose only 52.5% cases.

Conclusion: IOS is a sensitive tool for diagnosis of airway diseases when compared to spirometry, in patients with minimal cooperation and can be used as an alternative for spirometry.

Keywords: Impulse oscillometry, spirometry

OP-No.: 28

Role of Ultrasonography in Diagnosis and Management of Acute Respiratory Failure: An Observational Study from a Tertiary Care Center

Author – Dr Bidisha Devi

Background: Early and accurate diagnosis of acute respiratory failure leads to improved outcomes on patient management. It relies on reliable imaging modality, which may be challenging difficult in an emergency setting. Portable chest X-ray is neither sensitive nor specific for many etiology. ICU patients are difficult to mobilize for better modalities like CT thorax. Hence, the importance of bedside ultrasonography has emerged for such scenarios. This diagnostic test is useful in evaluating certain cases, such as - pneumonia, pleural effusion, pneumothorax, interstitial lung disease, and diaphragmatic palsy.

Objective: To study the sensitivity and specificity of chest ultrasound (USG) in patients with acute respiratory failure.

Methods: Observational study conducted in the Department of Pulmonary Medicine, GMCH from December 2022 to July 2023 among 61 subjects. The results were compared with a portable chest X-ray and CT thorax.

Results: Out of the 61 cases, 28 were diagnosed as pleural effusion (45%), consolidation 19 cases (31%), pneumothorax 5 cases (8%) and COPD 9 cases (14%). The overall sensitivity of USG in diagnosing pleural effusion, consolidation and pneumothorax was 80.3%; however, it was the least useful for COPD where chest X-ray was found to be more sensitive. According to a study conducted in Greece by Xirouchaki et al (2014), "Impact of lung ultrasound on clinical decision making in critically ill patients", the sensitivity of lung ultrasound was found to be 85.6%. Another study by Bouhemad et al, "Clinical review: bedside lung ultrasound in critical care practice" found the sensitivity of lung USG to be 86%. Thus, the findings of this study correlates previous findings.

Conclusion: Chest ultrasonography with sensitivity of 80.3% is found to be a superior bed side imaging modality than standard chest radiography - for identifying pleural effusion, pneumothorax and consolidation and differentiating a effusion from pleural thickening or consolidation, correlating strongly with results of chest CT scanning.

Keywords: Acute respiratory failure, pneumonia, pleural effusion, pneumothorax

OP-No.: 29

Artificial Intelligence Unveils the Unseen: Mapping Novel Lung Patterns in Bronchiectasis via Texture Analysis”

Authors – Dr Athira Nair, Ms Greeshma MV, Dr Deepak Benny, Dr Jayaraj BS, Dr Mahesh PA

Background and Objectives: Thin-section computed tomography (CT) is the most sensitive imaging modality for the detection of bronchiectasis. Artificial intelligence-based analysis may identify novel information on the lung involvement.

Methods: Cross-sectional study design. Here, demography, pulmonary function data, Bronchiectasis Radiologically Indexed CT Score (BRICS) severity score assessment, Artificial Intelligence software tool, Imbio was used to map the abnormal lung textures.

Results: Total of 27 subjects were selected, based on the BRICS severity score assessment subjects were classified into mild (n = 2), moderate (n = 11), severe (n = 6) and tractional bronchiectasis (n = 8) groups. The use of quantitative lung texture analysis with the Imbio software revealed that the subjects with bronchiectasis also had significant alveolar and interstitial components, not identified by regular thin-section CT scans. Subjects with mild bronchiectasis exhibited the lung texture – ground-glass pattern involving more than 1/5th of the lungs (21.5 ± 0.07%), as well as small areas of reticular % (4.5 ± 0.07) and hyperlucent % (1.0 ± 0.05) patterns, but no honeycombing. Subjects with moderate bronchiectasis had ground-glass pattern in nearly 1/5th of lungs (18.18 ± 0.6), while the hyperlucent % (7.0 ± 0.57), reticular % (6.4 ± 0.1) and honey combing % (2.55 ± 0.4) were greater in these subjects than in those with mild bronchiectasis. Subjects with severe bronchiectasis also had ground glass pattern involving 1/5th of the lung fields (20 ± 1.4), and greater hyperlucent % (15.67 ± 0.4), reticular % (9.6 ± 0.4) and honeycombing % (4.1 ± 0.3) than in those with moderate bronchiectasis. In subjects with tractional bronchiectasis, hyperlucent % (14.1 ± 0.8), reticular % (10.7 ± 0.5), ground-glass pattern % (6.8 ± 0.3) and honeycombing % (4.7 ± 0.3) were observed.

Conclusion: The use AI assisted software identifies novel findings delineating significant lung alveolar and interstitial involvement not identified by conventional HRCT. The impact of this parenchymal involvement on the clinical course of the disease and additional therapeutic strategies need further study.

Keywords: Bronchiectasis, IMBIO, Lung texture analysis

OP-No.: 30

Etiology and Clinico-radiological Profile of Nonresolving Pneumonia: A Prospective Observational Study in a Tertiary Care Health Center

Authors – Dr Devanandan K, Dr N Narendra Kumar, Dr K Bhaskar, Dr GK Paramjyothi

Background and Objectives: Pneumonia is a common clinical condition with good outcomes to empirical antibiotic therapy in community background. Nonresponsive patients to initial empirical therapy are clinically challenging and may have broad differential diagnoses. We aimed to study the etiology and clinico-radiological profile of patients admitted with nonresolving pneumonia in our tertiary care health center.

Materials and Methods: It was a hospital-based prospective observational study, conducted in the Pulmonology Department of NIMS Hyderabad from October 2021 to September 2022. After applying inclusion and exclusion criteria, a sample size of 56 patients was collected and were further worked up for the causative factors and clinical profile of nonresolving pneumonia.

Results: Out of 51 patients whom etiology was diagnosed, bacterial pneumonia (multidrug-resistant) (12 patients) was the commonest cause of nonresolving pneumonia, followed by tuberculosis (11 patients), pulmonary mucormycosis (7 patients), malignancies (7 patients), and pulmonary Aspergillosis (3 patients). Comorbidities like COPD, diabetes, and alcoholism, were significant factors causing nonresolution.

Discussion: Despite the advancement in infection control, infectious causes like multidrug-resistant bacterial pneumonia and pulmonary tuberculosis still form major etiology of nonresolving pneumonia. The dynamics of agent, host and environmental factors contributing to nonresolution have also changed over the years. The incidence of fungal pneumonia has increased in this post-COVID era. Malignancies like pulmonary adenocarcinoma, rarer causes like carcinoid tumor and pulmonary alveolar proteinosis all can mimic pneumonia and need to be evaluated.

Conclusion: This study stresses the need for a systematic approach and need of early referral to a tertiary health center to find out the etiology and properly manage nonresolving pneumonia.

Keywords: Etiology and clinico-radiological profile of nonresolving pneumonia

OP-No.: 31

Antibiotic Resistance Pattern among Pathogens Causing Community-acquired Pneumonia among adult Patients Admitted in Our Hospital

Author – Dr Darshi Rastogi

Background and Objectives: The emergence and spread of antibiotic resistance has caused panic across among hospitals and intensive care units around the globe. To identify the causative pathogen causing community-acquired pneumonia and study their pattern of antibiotic sensitivity and resistance.

Methods: This was a single-center, in patient hospital-based cross-sectional study conducted over a period of 12 months among a total of 156 patients admitted to the hospital with a diagnosis of community-acquired pneumonia. The pathogen was identified by culture of the sputum specimen and sample was taken within 24 hours of admission. Thereafter, the isolated pathogen was tested for their sensitivity against a panel of antibiotics.

Results: The mean and median age of the patients enrolled in the present study were 51.9 and 54 years, respectively. A positive culture/bacterial growth was seen in 133 samples (85.3%) and atypical (14.7%) out of the 156 samples that had bacterial growth. In the present study, *Streptococcus pneumoniae* (21.7%) was the single most common bacteria identified on bacterial culture, followed by other *Haemophilus influenzae* (19.8%), and *Klebsiella pneumoniae* (16.7%) and *Staphylococcus aureus* (14.7%). *S. pneumoniae* specimens were sensitive to piperacillin, tazobactam, cefuroxime, imipenem, polymyxin B, and colistin.

Conclusion: The result emphasize the urgency of addressing antibiotic resistance as a public health priority and reinforce the significance of adopting evidence based practice to optimize antibiotic therapy. *S. pneumoniae* was the single most common bacteria identified on bacterial culture among patients diagnosed with community-acquired pneumonia.

Keywords: Antibiotic resistance, community-acquired pneumonia

OP-No.: 32

Concordance Between Clinical, Bronchoscopic and Confirmatory Diagnosis in Patients Undergoing Bronchoscopy

Authors – Dr Sreelekshmi S, Dr Davis Paul C, Dr Krishnakumar EV, Dr Arun NA

Background and Objectives: Fiberoptic bronchoscopy (FOB) is now a routine diagnostic procedure for Pulmonologists. Indications of FOB is widening constantly and often it is done without a definite diagnosis. In this context, it is important to have an assessment of the bronchoscopic diagnostic procedures. The objective of this study was to determine the yield and the concordance between clinical, bronchoscopic and confirmatory diagnosis.

Case Study: This is a cross-sectional study in patients undergoing FOB. The clinical diagnosis was made from history, physical examination and routine investigations. FOB diagnosis was made based on the bronchoscopic findings. Final diagnosis was based on the biopsy/brush/wash/bronchoalveolar lavage report. Then concordance between clinical, bronchoscopic and final diagnosis was determined. Yield and concordance between two bronchoscopist was also studied.

Discussion: Out of 134 FOB's, the confirmatory diagnosis was made in 111 (82.83%). There were 15 (11.19%) cases of TB and 29 (21.6%) cases infections, 48 (35.8%) cases of malignancy and 19 (14.17% other diagnosis. In 23 (17.16%) there were no definite diagnosis. The concordance between bronchoscopic and confirmative diagnosis was better in TB (100% n = 15/15) and infections (86.2% n = 25/29), malignancy (81.25% n = 39/48). There was a fair agreement between clinical and bronchoscopic diagnosis kappa 0.307. The concordance between bronchoscopic and confirmatory diagnosis had a substantial agreement with (Kappa value-0.749). There was a statistically significant difference in yield among bronchoscopists p = 0.001

Conclusion: The agreement between bronchoscopic and confirmatory diagnosis is substantial. There was a significant difference in yield among bronchoscopists

Keywords: Clinical diagnosis, bronchoscopic diagnosis, confirmatory diagnosis, concordance

OP-No.: 33

The Correlation of FeNO Level with the Absolute Eosinophil Count and Level of Bronchial Asthma Control: Cross-Sectional Study

Authors – Dr Priyadarshini N, Prof Dr Ramesh PM, Prof Dr Murugan N, Dr V Devanathan

Background and Objectives: Fractional exhaled nitric oxide (FeNO) is a convenient to use biomarker of airway inflammation. Here we aim to find the mutual relationship between FeNO, peripheral blood eosinophil count and pulmonary function tests (PFTs) in bronchial asthma patients. This study was carried out to determine the accuracy of peripheral blood eosinophil to detect eosinophilic airway inflammation as determined by FeNO cut-off points.

Case Study: Fifty patients with partly controlled bronchial asthma performed the following tests on the same day: FeNO, PFTs, and peripheral blood eosinophils. The correlation between these test was investigated and the diagnostic accuracy of peripheral blood eosinophils to identify eosinophilic asthma phenotype was calculated using receiver operating characteristics area under the curve (ROC AUC).

Discussion: Higher FeNO levels were strongly correlated with bronchial asthma and was highly sensitive in predicting bronchial asthma. The FeNO was positively correlated with percentage of blood eosinophil count.

Conclusion: In patients with partly controlled asthma, peripheral blood eosinophil showed useful accuracy in predicting eosinophilic airways. FeNO was positively correlated with peripheral blood eosinophil count.

Keywords: FeNO, bronchial asthma, absolute eosinophil count, PFT

OP-No.: 34

Evaluation of Gene Xpert Ultra – “Trace Call” in Presumptive Pulmonary Tuberculosis Cases in a High TB Burden Setting

Authors – Dr A Keerthi Prakash, Dr AR Gayathri

Background and Objectives: In 2017, WHO recommended GeneXpert MTB/RIF Ultra for detecting TB and rifampicin-resistant TB based on meta-analysis showing an approximately 6% overall improvement in sensitivity for Ultra compared to GeneXpert. This increased sensitivity is largely due to “trace calls”, which have decreased the overall specificity by 3%.¹

“Trace calls” creates clinical dilemmas as they detect very low bacterial count and nonviable bacteria, especially in highly endemic countries like India.² Studying the clinical significance of “trace calls” in Indian settings and guiding the early treatment initiation is the objective of this study.

Methodology: This observational monocentric retrospective study was done at Apollo Hospitals, Greams Road, Chennai, between April 2022 and January 2023. After excluding cases lacking follow-up and no clinical data, 94 trace calls were included in this study. All trace calls were categorized into 4 types based on a composite reference system (CRS).

Results: Of the 94 participants, only 2 (2.12%) showed growth in MGIT 960 system, and 1 (1.06%) showed *Mycobacterium simiae* growth. None were acid-fast stain positive. In 8 out of 94 (8.51%), endobronchial biopsy and bronchial wash cytology showed malignancy. Based on composite reference system (CRS), confirmed TB were 2 (2.12%), probable TB were 81 (86.17%), possible TB were 2 (2.12%), and not TB were 9 (9.57%). Among the 9 not TB category, only 1 had a history of prior ATT within the last 5 years.

Conclusion: Trace calls have helped detect pulmonary TB early in 86.17% of whom MGIT cultures were negative but were categorized into probable TB by CRS. Due to trace call, 9.57% was false-positive. The history of prior ATT had less impact on the false-positive results. Though overdiagnosis is possible due to Xpert Ultra trace calls, it still helps in the early diagnosis of smear-negative culture-negative TB.

Keywords: Xpert Ultra, trace calls, extrapulmonary TB, pulmonary TB, composite reference system, MGIT 960 system

References: ¹Chilukutu L, Mwanza W, Kerkhoff AD, Somwe P, Kagujje M, Muyoyeta M. Prevalence and interpretation of Xpert® Ultra trace results among presumptive TB patients. *Public Health Action*. 2022 Mar 21;12(1):28–33. ²Zifodya JS, Kreniske JS, Schiller I, Kohli M, Dendukuri N, Schumacher SG, et al. Xpert Ultra versus Xpert MTB/RIF for pulmonary tuberculosis and rifampicin resistance in adults with presumptive pulmonary tuberculosis. *Cochrane Database Syst Rev* [Internet]. 2021 [cited 2023 Aug 14];(2). Available from: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009593.pub5/full>

Oral Papers: NCCP Award

OP-No.: 59

A Study to Correlate Sleep Stage Independent Obstructive Sleep Apnea with Polysomnographic Variables and Sleep Questionnaires

Authors – Dr Beauty Prasad R, Dr Shashi Bhushan BI, Dr Deepa AS

Background and Objectives: Obstructive sleep apnea (OSA) is a common sleep disorder, characterized by recurrent episodes of complete or partial upper airway collapse and intermittent hypoxemia. The objective of this study was to correlate sleep stage independent OSA with polysomnographic variables and sleep questionnaires.

Methods: This was a retrospective study of 90 patients with OSA patients (47 males) were categorized into REM, NREM and non-NREM OSA (Sleep stage independent OSA). The criteria used for REM OSA was AHI-REM/AHI-NREM ≥ 2 , NREM OSA was NREM-AHI/REM AHI ≥ 2 and sleep stage independent OSA NREM-AHI/REM-AHI < 2 . Sleep stage independent OSA was correlated with OSA severity, lowest SpO₂, BMI, STOP-BANG and ESS scores.

Result: The mean age of study population was 54.6 \pm 12.2 years; mean AHI was 38.47 \pm 22.5 and mean BMI was 33.7 \pm 5.38. Out of 90 OSA patients, 9 had mild OSA (AHI-5-<15), 26 had moderate OSA (AHI-15-<30) and 52 had severe OSA (AHI ≥ 30). Based on AASM criteria 21 patients had REM OSA, 22 NREM and 48 had sleep stage independent OSA. Out of 48 sleep stage independent OSA cases, 2 mild, 16 moderate and 30 were severe OSA. There were significant correlations between AHI, REM and NREM-AHI with BMI, lowest SpO₂, STOP-BANG score and BMI (p value, 0.001).

Conclusion: This study concluded that sleep stage independent OSA group had more severe OSA. The proportion of sleep stage independent OSA cases were greater than the other 2 groups. Hence, as severity of OSA increases apnea can occur independent of sleep stages. This study emphasizes on the need for future studies to probe into etiopathogenesis of sleep stage independent OSA.

Keywords: Sleep stage independent OSA, REM OSA, NREM OSA, polysomnography

OP-No.: 60

A Prospective Longitudinal Study of Chronic Pulmonary Aspergillosis in Newly Diagnosed Pulmonary Tuberculosis Patients from Diagnosis Till End-of-Treatment

Author – Dr Dhoul Jha

Background and Objectives: Chronic pulmonary aspergillosis (CPA) and pulmonary tuberculosis (PTB) can co-exist together and may complicate the clinical course of each other. Primary objective of this study is to estimate the frequency of CPA in a newly diagnosed PTB at baseline and at end-of-therapy (after 6 months of antitubercular therapy).

Methods: This was a prospective longitudinal study done over 2 years. Patients with newly diagnosed PTB were evaluated at baseline, third month and end-of-therapy with symptom assessment, anti-*Aspergillus* IgG antibody estimation (ImmunoCAP Asp IgG assay, Thermo Fisher Scientific Inc, >27 mg/L considered as positive) and radiological imaging of chest (chest X-ray and/or CT thorax). CPA diagnosis was done on the basis of clinico-radio-serological criteria (ERS/IDSA/ESCMID).

Results: A total of 256 patients were recruited at baseline out of which 156 (61%) patients completed their follow-up. At baseline ~50% patients had microbiological evidence of PTB. Anti-*Aspergillus* IgG was positive in 10.8% at baseline, 26.9% at third month and 31.8% at end-of-therapy. Overall, the criteria of proven CPA was fulfilled in 7%, 11% and 14% patients at baseline, third month and end-of-therapy, respectively. Radiologically, nodules (79%) and consolidation (62%) were the most commonly seen radiological findings at the baseline while fibro-parenchymal opacities (95%) and nodules (72%) were the most common radiological findings at the end-of-therapy. Cavity was found in 22% patients at baseline and 15% patients at the end-of-therapy. Six percent patients had evidence of aspergilloma in CT chest at the end-of-therapy.

Conclusions: CPA can coexist in newly diagnosed PTB patients at the time of diagnosis and develop during treatment as well as at end-of-antitubercular treatment. Patients with persistent symptoms or developing new symptoms during treatment for PTB should be evaluated for CPA.

Keywords: Chronic pulmonary aspergillosis, pulmonary tuberculosis, IgG antibody, ImmunoCAP

OP-No.: 61

Assessment of Knowledge and Practices Regarding Oxygen Therapy among MBBS Interns in a Tertiary Care Hospital, South India

Authors – Dr Paritala Akhil, Dr Ramya Priya, Dr N Meenakshi, Dr R Sridhar

Background and Objectives: Oxygen therapy is among the commonly used and essential requirement in acute emergencies and chronic type-I respiratory failure. Supplemental oxygen therapy plays a vital role in preventing and managing tissue hypoxia in patients with acute and chronic disorders. The choice of oxygen delivery device (low flow devices: Nasal prongs, face mask, NRBM or high-flow devices: Venturi mask, high-flow nasal cannula) and flow rate of oxygen depends on many factors, such as the patient's age, the doctor's treatment goals, and patient's tolerance. If not properly handled, oxygen administration can cause deleterious effects in patients. Prescription and administration of oxygen in emergencies by health care providers are reported to be inappropriate in most settings. There is a huge gap in the knowledge amongst MBBS interns on various aspects of oxygen therapy. The purpose of this study was to assess the knowledge, attitude and practice of oxygen therapy among MBBS interns by using structured questionnaires.

Methods: Questionnaire based cross-sectional study was conducted across 258 participants. All MBBS interns who give therapeutic oxygen and make choices relating to its administration were included in the study.

Results: In this study, it was found that 45% of the 258 participants exhibited a good level of knowledge, with a mean standard deviation of 9.83 ± 2.584 . 32% of health care providers displayed a good level of practice, with a mean standard deviation of 4.08 ± 2.09 . Among those who did not receive prior oxygen therapy training, surprisingly they demonstrated fair level of knowledge (50.4%). However, they demonstrated poor level of practice (40.7%).

Conclusion: Formal training in oxygen therapy and oxygen delivery devices is must for MBBS interns. Periodic oxygen therapy training must be considered among health care workers to maintain their knowledge up-to-date and frequent assessment of their standard practices must be carried out.

Keywords: Oxygen therapy, MBBS interns

OP-No.: 62

Prevalence and Predictors of Suboptimal Peak Inspiratory Flow Rates in the Management of COPD

Authors – Dr Vemuri Mahesh Babu, Dr Madhusmita M Mohapatra, Dr Vinod Kumar Saka, Dr Pratap Upadhyaya

Background and Objectives: Chronic obstructive pulmonary disease (COPD) treatment involves the use of drugs through devices such as metered-dose inhalers (MDIs), dry-powder inhalers (DPIs), soft mist inhalers (SMIs), and nebulizers. The use of peak inspiratory flow rate (PIFR)-guided prescription of inhalation therapy in COPD can influence the management and outcome of COPD patients.

Materials and Methods: This cross-sectional study was conducted in the Department of Pulmonary Medicine of a tertiary care institute from July 2021 to January 2022. Patients who were clinically diagnosed with stable COPD and on inhaler therapy were included in the study. Demographic factors, ABCD assessment tool, CAT score, test for adherence to inhaler score, and inhaler technique score were assessed. The prevalence and factors associated with suboptimal PIFR in COPD patients were analyzed using the descriptive statistics and regression model.

Results: A total 351 COPD patients were included in the study. The mean age of study population was 61.28 ± 9.05 years with majority in age range of 50 to 69 years and most of them were nonsmokers. The prevalence of suboptimal PIFR was found to be 45%. Female gender, lower CAT score, inhaler device type, and mMRC grade of ≥ 2 was found to be significant predictors of suboptimal PIFR in our study.

Conclusion: Suboptimal PIFR is a crucial parameter for determining adequate drug delivery to COPD patients. Personalized inhaler device prescription to COPD patients would help in better management of COPD.

Keywords: COPD, inhaler devices, inspiratory capacity

OP-No.: 63

Comparative Study on Impulse Oscillometry and Spirometry in Diagnosing Obstructive Lung Diseases

Authors – Dr Vamsi Krishna Pendyala, Dr V Surya Kumari, Dr Fasiha Afreen

Introduction: Obstructive respiratory conditions encompass asthma and chronic obstructive pulmonary disease (COPD), standing as the fourth leading cause of overall mortality. Spirometry stands as the preferred method for appraising obstructive lung disease, with forced expiratory volume in 1 second (FEV1) serving as a key diagnostic and severity marker for these conditions. The assessment of FEV1 hinges on the patient's level of cooperation. In contrast, the forced oscillation technique (FOT) examines the interplay between external forces in respiratory ailments and the conduction of airflow. FOT circumvents the necessity for forced expiratory maneuvers.

Aim of the Study: Aim of the study is to compare impulse oscillometry (IOS) with conventional spirometry in patients suffering with chronic obstructive lung diseases.

Materials and Methods: It is a cross-sectional study conducted on 100 patients (healthy adults, asthmatic patients and patients with COPD) attending the Department of Pulmonary Medicine, GGH, Kakinada, Andhra Pradesh during June 2023 to August 2023.

Results: Significant variations were observed among the three categories with regard to all spirometric parameters and certain parameters of IOS assessments. We identified a correlation between R5, R20, and X5 with FEV1 in individuals with asthma, while only R5 exhibited this correlation with FEV1 in COPD patients. In some patients with normal spirometry, oscillometry is able to detect the obstructive lung diseases.

Conclusion: IOS can be a good alternative of spirometry for the diagnosis of obstructive lung disease in patients with minimal cooperation.

Keywords: Impulse oscillometry system, Spirometry, forced oscillation technique, asthma, COPD

OP-No.: 64

A Severity-of-Illness Score to Predict the Mortality of TB Patients Admitted to ICU

Authors – Dr K Mothilal, Dr CH RN Bhushana Rao, Dr Prathap Reddy

Background and Objectives: A retrospective study was done to validate a 6-point severity-of-illness score aimed at identifying patients at risk of dying of tuberculosis (TB) in the intensive care unit (ICU). The scoring parameters included septic shock, HIV infection with a CD4 count <200 cells/ μ L, renal dysfunction, a ratio of partial pressure of arterial oxygen to fraction of inspired oxygen (P/F) <200 mmHg, a chest radiograph demonstrating diffuse parenchymal infiltrates, and no TB treatment on admission. Our objective was to validate the severity-of-illness scoring system in patients with TB requiring intensive care, and to understand its clinical utility.

Methods: A prospective observational study with retrospective analysis was done by enrolling all adult patients with confirmed TB admitted to the medical ICU at a tertiary hospital in Visakhapatnam, Andhra Pradesh, from 1 January 2022 to 31 July 2023. The admission data of all adult patients with TB requiring admission to the ICU were used to calculate the 6-point severity-of-illness score and its significance determined. Descriptive statistics and χ^2 or Fisher's exact tests were performed on dichotomous categorical variables, and *t*-tests on continuous data. Patients were categorized as hospital survivors or nonsurvivors.

Results: Forty-one of 78 patients (52.6%) died. The 6-point scores of nonsurvivors were higher than those of survivors. A score ≥ 3 vs. <3 was associated with increased mortality (64.0% vs. 32.1%; odds ratio [OR] 3.75; 95% confidence interval [CI] 1.25-10.01; *p* = 0.01). As individual score components, a P/F ratio <200 mmHg and no TB treatment on admission failed to predict mortality, whereas any immunosuppression did.

Conclusions: The 6-point severity-of-illness score identifies patients at increased risk of death and is a reliable indicator for predicting mortality outcomes in TB patients admitted to ICU.

Keywords: Tuberculosis, sepsis, HIV, immunosuppression

OP-No.: 65

A Cross-Sectional Study to Assess Potential of Serum Uric Acid, Uric Acid Creatinine Ratio as Prognostic Markers for Assessing COPD Severity and COPD Related Cor Pulmonale

Authors – Dr Girija D, Prof Dr K Anbananthan, Dr A Ramasamy, Dr SA Natesh, Dr A Kirubanandam

Background and Objectives: Chronic obstructive pulmonary disease (COPD), a major global cause of death, is overlooked and underdiagnosed, leading to underestimated disease burden. To address prognostic marker is essential for accurate COPD diagnosis and severity assessment. Research indicates elevated serum uric acid levels in COPD patients compared to non-COPD individuals, attributed to hypoxia. Therefore, we aimed to measure serum uric acid and serum uric acid creatinine ratio in COPD patients to evaluate severity/exacerbation and their link to cor pulmonale development.

Methods: We did cross-sectional study involving 55 COPD patients at Thanjavur Medical College Hospital, Thoracic Medicine OPD and IPD. The patients clinical history, relevant investigations (serum uric acid, uric acid creatinine ratio, spirometry as per GOLD criteria) and echocardiogram were done. Data was analyzed using STATA to identify associations with severity, exacerbation, and cor pulmonale development.

Results: Among 55 participants, 44% (n = 24) experienced acute COPD exacerbations: mild (44%, n = 24), moderate (40%, n = 22), severe (11%, n = 6), and very severe (5%, n = 3). Echocardiograms revealed pulmonary hypertension in 51% (n = 28). Exacerbation patients had higher mean serum uric acid (5.41 ± 1.15) than stable COPD patients [4.41 ± 1.09 , $p < 0.05$], and exacerbation cases showed elevated uric acid/creatinine ratios (5.85 ± 1.13) compared to stable patients (4.33 ± 1.28 , $p < 0.05$). Severe and very severe COPD patients had elevated serum uric acid and uric acid/creatinine ratios compared to mild and moderate cases ($p < 0.001$). Participants with echocardiogram changes exhibited significantly higher mean serum uric acid (5.79 ± 0.60) and uric acid/creatinine ratios [6.03 ± 1.09], $p < 0.001$] than those without changes (mean urea: 3.87 ± 0.85 , uric acid/creatinine ratio: 3.92 ± 0.92).

Conclusion: Higher serum uric acid levels and uric acid/creatinine ratios were seen in COPD exacerbation and cor pulmonale cases. This suggests their potential as prognostic marker for assessing COPD severity and COPD related cor pulmonale.

Keywords: COPD, uric acid, creatinine, cor pulmonale, pulmonary hypertension

OP-No.: 66

Ventilatory Limitation and Gas Exchange Abnormality as Post-COVID-19 Sequelae in Patients with Severe COVID-19 Disease: A Cardiopulmonary Exercise Testing Study

Authors – Dr Jessy Aleyamma Jose, Dr Sourabh Pahuja, Dr Deepak Prajapat, Dr Deepak Talwar

Background and Objectives: Cardiopulmonary exercise testing (CPET) is a dynamic, noninvasive assessment of the cardiopulmonary system at rest and during exercise. CPET determines the functional capacity of an individual. COVID-19 had emerged as one of the largest pandemics in human history. Various organs are affected in post-COVID-19 patients, especially pulmonary complications. The current study aimed to assess the frequency of cardiopulmonary sequelae in patients with different grades of severity of COVID-19 using cardiopulmonary exercise testing.

Methods: Forty-five patients who have been diagnosed as COVID-19 positive were identified and are in follow-up. Data collected from cardiopulmonary exercise testing were analyzed in comparison with the severity of COVID-19. Ethical clearance was taken from the Institution Ethics Committee (Ethical Review Board, Metro Hospitals and Heart Institute) before carrying out this research.

Results: We observed ventilatory limitation being the most common CPET abnormality with 46.67% of post-COVID patients. Peripheral muscle deconditioning was the second most common CPET abnormality observed in our study population with 44.44% of the study population. In patients who had mild COVID-19 disease, ventilatory limitation (40%) and peripheral muscle deconditioning (45%) were observed to be the commonest cardiopulmonary sequelae. However, inpatients who had severe COVID-19 disease, ventilatory limitation (75%) was the commonest cardiopulmonary sequelae, followed by gas exchange abnormality (41.6%).

Conclusion: CPET is a reliable method for the evaluation of post-COVID-19 sequelae and is even more useful in evaluating the cause of dyspnea in conditions where the pulmonary function test is normal. The increase in the occurrence of ventilatory limitation and gas exchange abnormality in patients who had severe COVID-19 disease, when compared with mild disease denotes the effect of the severity of COVID-19 disease on pulmonary functions, thus culminating in post-COVID-19 sequelae.

Keywords: CPET, COVID-19, post-COVID-19 sequelae

OP-No.: 67

Prevalence of Sarcopenia in Chronic Obstructive Pulmonary Disease

Authors – Dr Krishnapriya S, Dr Suraj KP, Dr Safreena Muhammed

Background: Sarcopenia is characterized by the loss of muscle mass, strength, and function that often occurs with aging. It can often occur in various chronic diseases including chronic obstructive pulmonary disease (COPD). Sarcopenia in COPD is of particular concern because it can lead to decreased exercise capacity, worsened respiratory function increased morbidity and reduced quality of life.

Aims and Objective: To determine the prevalence of sarcopenia in patients with COPD.

Materials and Methods: This is a hospital-based observational study, carried out in the Outpatient Department and included 90 COPD patients and 90 control population. Calf circumference and SARC-F questionnaire data was collected from both population along with various risk factors including age, grade of dyspnea, smoking status, comorbidities, nutrition and PFT.

Results: A total of 180 patients were part of this study, of which 136 (75.5%) were males and 44 (24.4%) were females with a mean age of 68.46 ± 10.14 years. This study reported a significant risk of sarcopenia in COPD patients with a prevalence of 26% and more prevalent among individuals with greater severity, GOLD III-31%, GOLD IV-36% (p - 0.037), nutritional status (p - 0.008), comorbidities (p < 0.001), smoking (p 0.024).

Conclusion: Age, severity of COPD, malnutrition and smoking could be considered important risk factors for sarcopenia in COPD. Management of sarcopenia in COPD should be individualized based on patients overall health, disease severity, nutrition and other specific needs. Identifying and management of sarcopenia at early stage can significantly improve their muscle function, overall well-being and quality of life.

Keywords: Sarcopenia, COPD, calf circumference

Oral Papers: Non-Award

OP-No.: 68

Challenges of Living with Asthma: Results of a Survey in Indian Asthma Patients

Authors – Dr Swapna Nair, Dr Vaishali Naik, Dr Meena Lopez, Dr Jaideep Gogtay

Background and Objectives: India contributes to the largest number (34.3 million) of asthmatics globally. Getting a clearer perspective on how asthma affects lives of patients would help in devising interventions towards helping them manage their disease better. This survey was done to understand the patients' perspectives on the impact of asthma and challenges faced by them.

Methods: Data was collected from clinically diagnosed asthma patients or caregivers across India through an online survey conducted using the Breathefree App (Cipla Digital Health Ltd.) between June and August 2023.

Results: Data from 101 asthmatics (mean age 36.94 ± 17.72 years; 66.34% males) were obtained. Around 65.3% patients reported having adult-onset asthma. Eighty-three percent patients reported having day-time symptoms more than twice a week over the past 4 weeks; most common being cough (53.5%) and dyspnea (40.6%). Around 54.5% patients reported night-time awakening over the last 4 weeks due to asthma symptoms; 46.5% reported using their relievers at least once a day; 25.74% patients reported being hospitalized/visiting emergency department in the last 6 months. Patients reported avoiding physical exercise (48.5%), sports (33.7%), travel (32.7%), socializing (26.7%) and missing school/work (22.8%) due to ongoing symptoms. More than 50% patients reported that asthma negatively impacted their lives as they had to avoid certain foods (60.4%) and participation in activities (50.5%). About 32.7% patients reported that their asthma symptoms affected their families and 9.9% patients were avoided by relatives due to their symptoms. Asthma also had a significant impact on mental well-being of patients, making them worried (42.6%), instilling fear of breathlessness (33.7%), anxious (23.8%), frustrated (23.8%), depressed (20.8%), lonely (16.8%) and angry (14.9%).

Conclusions: Asthma in India is poorly controlled and has a significant impact on the quality of life of patients. There is an urgent need for improved strategies and support for patients with asthma to enable them to manage their asthma better.

Keywords: Living with asthma, quality of life, asthma patients, asthma challenges

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 1	Perumalla Harshita	perumallaharshita131@gmail.com	To Assess Prognostic Role Of Serum Electrolytes And Serum Uric Acid In Acute Exacerbation Of Copd In A Tertiary Care Centre In Telangana
EP 2	Sharon Anna Sam	sharonannasam@gmail.com	A Crosssectional Study Of Clinical, Radiological, Electrocardiographic And Echocardiographic Profile In Patients With Stable Chronic Obstructive Pulmonary Disease At A Tertiary Care Centre In Telangana
EP 3	Samreen Farooqu	farooquisamreen791@gmail.com	An Observational Study To Assess The Role Curb-65 Score In Predicting The Prognosis Of Patients Hospitalized With Acute Exacerbation Of COPD At A Tertiary Care Centre
EP 4	Gangangari Rakesh Reddy	rakeshreddy.gangangari@gmail.com	Assessment Of Serum Magnesium Levels In Bronchial Asthma Patients And Its Severity With Level Of Control Of Symptoms: A Cross Sectional Study
EP 5	Kankana Samanta	kankanasamanta99@gmail.com	A Case Report On Use Of Anaesthetic Conserving Device In A Patient With Bullous Cystic Lung Disease
EP 6	Dr Carishma S	dr.carishma@gmail.com	Role Of Inhaled Corticosteroids In COPD: Research Paper/Original Study
EP 7	Manisha Paul	manisha.paul11@gmail.com	Unexplained Shortness Of Breath In A Young Female Of Post Tuberculous Chronic Obstructive Pulmonary Disease
EP 8	Mansukh Hadiya	h.mansukh12@gmail.com	A Case Report Of Bronchial Ashtma Of Late Onset Presented As Allergic Broncho Pulmonary Aspergillosis (Abpa)
EP 9	Azmat Karim	karim_azmat@hotmail.com	Role Of Mepolizumab In Covid-19 Patients With Severe Eosinophilic Asthma
EP 10	Ketaki	ketaki.patil1@sunpharma.com	Unleashing The Concept Of Pre-Chronic Obstructive Pulmonary Disease: A Literature Review
EP 11	Dr. Kalpesh Panchal	kalpesh2434@gmail.com	Prevalence Of Small Airway Disease In Indian Patients With Asthma
EP 12	Dr. Shree Dhanusha. D	shreedhanushad@gmail.com	Study On Factors Associated With Health-Related Quality Of Life (Hrql) In Adults With Asthma In Rural Health Care Centre
EP 13	Dr Eada Chaitanya	dr.chaitueada@gmail.com	A Study On Vitamin D Levels In COPD Patients And Its Correlation With The Severity Of COPD
EP 14	Dr Ramesh Tk	drtkrams81@gmail.com	To Study The Prevalence Of Sino Nasal Disease In COPD And To Correlate With Severity Of Airflow Limitation
EP 15	Lavina Jain	lavina.x.jain@gsk.com	Systematic Literature Review To Determine Herpes Zoster Incidence In Patients With Chronic Respiratory Diseases In The European Union, Switzerland, And The United Kingdom
EP 16	Brs Chandra Sekhar	bchandu333@gmail.com	A Study Of Correlating COPD Severity And Smoking Index With Echocardiography And Ecg
EP 17	Dr. S. Balamurugan	dr.s.bala@gmail.com	Real-World Study To Evaluate The Efficacy And Safety Of Formoterol/Budesonide Combination Delivered Through A Breath-Actuated Inhaler In Patients With COPD
EP 18	S. Balamurugan	dr.s.bala@gmail.com	Results Of A Randomized, Open-Label, Cross-Over Trial Evaluating Usability And Acceptability Of Ciphaler, A Novel Multi-Dose Dpi, In Patients With Asthma Or COPD
EP 19	Ramshanker Reddy	ramshanker.reddy2@gmail.com	A Study To Compare Spirometric Observations In Smokers And Non Smokers In Age Group Between 25-55 Years
EP 20	Gowthami D C	manojkumarkb007@gmail.com	Correlation Of Six Minute Walk Distance And Forced Vital Capacity In COPD Patients
EP 21	Pavan N Kumar	pkreddy24297@gmail.com	COPD
EP 22	Dr S Balamurugan	dr.s.bala@gmail.com	Evaluation Of Ease Of Use Of Spirofytm, A Portable Spirometer For Diagnosis Of Obstructive Airway Disease: The Easyspiro Survey
EP 23	Ashfaq Hasan	inspiration.ah@gmail.com	Current Approaches In The Treatment Of Allergic Rhinitis Patients With Coexistent Asthma In Clinical Practice: The Arise Survey

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 24	J. Sam Selva Shruthi	shruthijustin108@gmail.com	Clinical Consequences Of Mucus Plugging In Bronchial Asthma: A Case Series
EP 25	Amirullah	aamirsiddique2009@gmail.com	Assessing The Usefulness Of Tissue Inhibitor Of Metalloproteinase-1 (Timp1) In Diagnosis Of COPD And Its Severity
EP 26	Manish Kumar Jha	jha3363@gmail.com	Relationship Between Spirometry, 6Mwt And COPD Assessment Test Scores In Assessing COPD Severity
EP 27	Sonia Dalal	drsoniadlal@hotmail.com	Trends In The Management Of Mild Asthma In India: Results Of The Trace Survey
EP 28	Dr Sanjeev Nair	drsanjeevnair@gmail.com	Understanding The Usage Of Triple Therapy For COPD In India: The Supreme Survey
EP 29	Ashwin K	ashwink376@gmail.com	Bacteriology And Antibiotic Resistance Patterns Of Respiratory Pathogens Among COPD Patients At Our Tertiary Care Center: Twelve Months Retrospective Study
EP 30	Anupama R	anupamarajeswari@gmail.com	Correlation Of Pulmonary Arterial Systolic Pressure And Cor Pulmonale With Disease Severity In Patients With Chronic Obstructive Pulmonary Disease
EP 31	Chetana A S	chetuasv18@gmail.com	Navigating The Tracheal Enigma: A Rare Case Of Tracheopathia Osteochondroplastica.
EP 32	Soyel Rana Mamtaj	soyelrana075@gmail.com	Pediatric Bronchiectasis
EP 34	Rakshana S	rakshanasriram3@gmail.com	Decaf And Modified Decaf Scores In Prognostication Of Acute Exacerbation Of COPD
EP 35	T.K.Sree Sandhya	vijisree17@gmail.com	Serum Albumin As A Prognostic Indicator In Patients With Non-Cystic Bronchiectasis
EP 36	Drmallika Barman	mallikabarman23@gmail.com	A Study To Assess The Magnitude Of Asthma-COPD Overlap (Aco) Among Patients Diagnosed As Asthma And COPD In A Tertiary Care Hospital In North-East India
EP 37	V. Balasubramanian	drviswes89@gmail.com	Saba Overuse And Its Impact In Indian Patients With Asthma
EP 38	Venkat Raj G	gvenkatraj1996@gmail.com	Inherited Whirlwind: Surprising Journey Of Genetic Disorder Unfolding As Respiratory Failure: A Rare Case Presentation
EP 39	Shardul Umesh Joshi	shardul@briota.co	Community Based Screening For Chronic Respiratory Diseases Through "Save - Screening, Diagnosis, Management Assisted Virtually Early": Findings From A Pilot Project In Rural India
EP 40	Aiswarya G	aiswaryag2@gmail.com	The Tunnel With The Humps And The Bumps
EP 41	Priyajeeta Mohapatra	dr.priyajeeta@gmail.com	Unilateral Bronchiectasis With Absent Right Pulmonary Artery Presenting As Obstructive Airway Disease
EP 42	Nisha Bopaiah K	nishabopaiah@gmail.com	Factors Responsible For Hypercapnia In Patients With Acute Exacerbation Of Chronic Obstructive Pulmonary Disease
EP 43	Shashidhar S Vananjakar	dr.ssvananjakar@yahoo.com	Unveiling The Connection: Vegetative Matter'S Impact On Bronchiectasis- A Case Series
EP 44	Dr Srikanth Krishnamurthy	drsrikanthcbe@gmail.com	Prospective, Multicentre, Phase IV Trial Evaluating Safety And Efficacy Of Glycopyrronium/Formoterol/Budesonide Fixed-Dose Combination (Fdc) In COPD Patients
EP 45	Eshita Sharma	eshita.sharma@cipla.com	Comparative In-Vitro Performance Evaluation Of Two Salmeterol/Fluticasone (50/250Mcg) Multidose Discrete Dry Powder Inhalers
EP 46	Dr. Santha Balamurugan	dr.s.bala@gmail.com	A Survey On Use Of N-Acetylcysteine (Nac) And Its Combination In Respiratory Conditions: Understanding Practice Pattern Amongst Indian Chest Physicians And Consulting Physicians (Unicip Study)
EP 47	Narra Sweta	narrasweta@gmail.com	A Rare Case Of Combined Idiopathic Pulmonary Fibrosis With Emphysema
EP 48	Amith A	amithmbbs01@gmail.com	The Role Of Ct In The Evaluation Of Mediastinal Masses
EP 49	Amith A	amithmbbs01@gmail.com	Bode Index And Age: Chronic Obstructive Pulmonary Disease
EP 50	Cottadiyil Remi Issac	rems12011996@gmail.com	Chalk Choking Up Trouble For Teachers: A Cross Sectional Study

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 51	Prathyusha Koritala	prathyukoritala@gmail.com	Psychological Disorders And Their Impact On Health Status In COPD
EP 52	Anna Jacob	annaannu@gmail.com	An Unusual Cause For Steroid Dependent Bronchial Asthma
EP 53	Aneetta Jose	aneettajose1995@gmail.com	Evaluating The Reason For Non Adherence To Inhalers In Asthma And Copd Patients
EP 54	Dr. Ayushi Chander	dr.ayushichander@gmail.com	A Prospective Observational Study On The Bacterial Flora In Chronic Obstructive Pulmonary Disease During Exacerbation And Its Relationship With Respiratory Failure Interim Analysis
EP 55	Dr.S.M. Ahmed	fromahm9@gmail.com	Assessment Of Lung Function In Very Light Smokers Attending A Tertiary Care Hospital In South India
EP 56	Perumalla Harshita	perumallaharshita131@gmail.com	Airway Fibroepithelial Polyposis
EP 57	Rama Chandana G	chandana.rams.94@gmail.com	Kartagener Syndrome: A Classic Case
EP 58	S.M. Ahmed	fromahm9@gmail.com	Assessment Of Lung Functions In Very Light Smokers Attending A Tertiary Care Hospital In South India
EP 59	Sai Chakravarthy	saichakravarthyb@gmail.com	Allergic Bronchopulmonary Aspergillosis Masquerading As Mass With Collapse
EP 60	Swapna Nair	swapna.nair1@cipla.com	Comparative In Vitro Performance Evaluation Of Formoterol/Budesonide Combination Delivered Through A Novel Multi-Dose Dry Powder Inhaler Versus A Unit-Dose Dry Powder Inhaler
EP 61	Anupama Gupta	dragupta66@gmail.com	Altered Autonomic Activity In Obese Asthmatics
EP 62	Taniya Mehta	taniya.mehta1709@yahoo.com	Patterns Of Fungal Allergy In Bronchial Asthma And/Or Allergic Rhinitis Patients: A Retrospective-Analytical Study
EP 63	Dr. Taniya Mehta	taniya.mehta1709@yahoo.com	Absolute Eosinophil Count, " Predictor Of Severity Of Bronchialasthmaand Its Future Outcomes"
EP 64	Nallam Vaishnavi	nallamvaishnavi@gmail.com	Study On Lung Function Abnormalities In Proven Cases Of Gastro Esophageal Reflux Diseases
EP 65	S.Sarumathi	saruselvaraj@gmail.com	Study Of Effects Of Yoga In Patients Of Bronchial Asthma At A Tertiary Care Hospital: A Randomized Controlled Study
EP 66	Patel Ronakkumar Navneet Bhai	rnpatel6692@gmail.com	Which Is Better For COPD Patients-The Six Minute Walk Test Or The Sit To Stand Test? A Hospital Based Cross Sectional Study
EP 67	Divyesh Patel	dvsh529@gmail.com	Obesity And COPD Severity: An Observational Cross-Sectional Study
EP 68	Saurabh Patil	patilsaurabhr@glenmarkpharma.com	A Drug Utilization Study To Evaluate The Use Of Mometasone Furoate / Indacaterol Acetate Dpi (Ics/Ulaba) At Various Chest Clinics Across India: Results From Interim Analysis
EP 69	Mohan Matriya	mohanmatriya@gmail.com	Prevalence Of Allergic Broncho Pulmonary Aspergillosis In Patients With Asthma Attending Tertiary Care Institute In Agra
EP 70	Naligala Augustine Aswini	drashwini1988@gmail.com	Factors Influencing The Severity Of An Exacerbation Of Bronchiectasis And Length Of Stay In Hospital
EP 71	Sivasubramaniam Karunakaran	sivasubramaniam1810@gmail.com	Piercing The Veil: Unravelling Unresponsive Asthma To Reveal The Hidden Culprit
EP 72	Priti Garate	pritagajbe@lupin.com	Budesonide/Formoterol/Glycopyrronium Usage Trends In Patients With Chronic Obstructive Pulmonary Disease: A Nationwide Survey Of 741 Respiratory Physicians From India
EP 73	Priti Garate	pritagajbe@lupin.com	A Nationwide Survey Amongst Respiratory Physicians From India On Perception Mapping Of A Combination Of Fluticasone Furoate/ Vilanterol In COPD
EP 74	Devika S Nair	devimed15@gmail.com	A Case Report Of Pulmonary Manifestation Of Autosomal Dominant Polycystic Kidney Disease

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 75	Manpriya Dogra	manpriya78@gmail.com	Allergic Bronchopulmonary Aspergillosis In The Elderly: A Case Report
EP 76	Shreyas Adyanthaya B	shreyasadyanthaya71@gmail.com	Reasons For Non Adherence To Inhaled Medications Among Patients With Obstructive Airway Disease Attending A Tertiary Care Hospital
EP 77	Amogh Ravindra Lotankar	amoghotankar@lupin.com	Understanding The Real-World Usage Of Once Daily Sitt (Indacaterol/ Glycopyrronium/Mometasone) In Management Of Asthma: A Nationwide Survey
EP 78	Swapna Nair	swapna.nair1@cipla.com	Comparative In Vitro Evaluation Of Two Multi-Dose Dry Powder Inhalers For Delivery Of Formoterol/Budesonide Combination
EP 79	Rhea Gandhi	rhea.gandhi.95@gmail.com	Audit Of Prescriptions Made By Conventional And Alternative Medical Practitioners In India Treating Bronchial Asthma And Copd In Adults
EP 80	Soumya V S	vssoumyam@gmail.com	Abpa Associated Pleural Effusion: An Unusual Presentation
EP 81	Sai Teja Pothabattula	saiteja.pothabattula@gmail.com	Mounier-Kuhn Syndrome
EP 82	Siva.S	s.siva465@gmail.com	Role Of Serum Fibrinogen Levels In Determining The Severity And Prognosis Of Acute Exacerbation Of Copd Patients
EP 83	Jyothi Kini	jyothirbr@yahoo.co.in	Youngs Syndrome: A Rare Cause Of Bronchiectasis
EP 84	Priyanka P Jena	priyankajena10@gmail.com	Clinical Effectiveness Of Triple Drug Therapy Combination Containing Laba, Lama And Ics Given For 12 Weeks In Non-Smoking Copd Patients: A Prospective Observational Study
EP 85	Dr Nivedita Bastia	bastia.nivedita@gmail.com	Ultrasonographic Assessment Of Diaphragm Function And Its Relationship With Gold Severity In Stable Copd Patients
EP 86	Paila Baby Shalini	shalinipaila@outlook.com	Comparing The 6Mwt With Spirometry For Assessing Severity In Copd Patients
EP 87	Dr S Vijayalakshmi	shivviji2000@gmail.com	To Analyse In-Hospital Mortality In Acute Exacerbation Of Copd: Comparison Between Bap65 And Modified Decaf
EP 88	Yeshashwini R	yeshashwiniramesh96@gmail.com	An Assessment Of Various Phenotypes Of Copd By Cluster Analysis
EP 89	Kalyani Krishna M	drkalyanikrishna1421@gmail.com	Role Of Fef25-75 And Its Bronchodilator Responsiveness In Evaluation Of Bronchial Asthma And Chronic Obstructive Pulmonary Disease
EP 90	Guttula Narayana Ravi Sai Dattu	ravisaidattu@gmail.com	To Study Predictive Capability Of Puma Score In Detection Of Copd
EP 91	Sudipta Nandan	nandan.sudipta@gmail.com	Role Of Health Insurance Coverage On Quality Of Life In Asthma: An Indian Scenario
EP 92	Priti Garate	pritagjbe@lupin.com	Budesonide/Formoterol/Glycopyrronium Usage Trends In Patients With Chronic Obstructive Pulmonary Disease: A Nationwide Survey Of 741 Respiratory Physicians From India
EP 93	C S G Lakshan	lakshancsg@gmail.com	Assessment Of Functional Impairment In Bronchiectasis With Spirometry Parameters And Its Correlation With St. George Respiratory Questionnaire Score
EP 94	Bana Mary Manishaa	manishaareddy97@gmail.com	A Case Of Pulmonary Tuberculosis Masking Underlying Abpa
EP 95	Vidya B Nair	vdnair0@gmail.com	Proportion Of Pulmonary Hypertension In Patients With Moderate To Severe Chronic Obstructive Pulmonary Hypertension
EP 96	Siva.S	s.siva465@gmail.com	Role Of Serum Fibrinogen Levels In Determining The Severity And Prognosis Of Acute Exacerbation Of Copd Patients
EP 97	Mohammad Shibly Ashhar	mdashhar14@gmail.com	Assessment Of Diaphragmatic Excursion To Rapidly Determine Severity Of Copd
EP 98	Mare Kusuma	kusumamare123@gmail.com	A Cross-Sectional Study On Association Between Allergic Rhinitis And Bronchial Asthma In Adults In Our Institute- By Using Rap Questionnaire

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 99	Md Ashraf Ali	ali.ashraf153@gmail.com	Relationship Of Bone Mineral Density (Bmd) With Clinical Parameters In Patients Of Chronic Obstructive Pulmonary Disease (COPD)
EP 100	Madhav Mahawar	madymahawar@gmail.com	A Clinical Study Of Serum Cystatin C Levels In Cases Of Copd And Its Correlation With Spirometry And Impact On Their Quality Of Life
EP 101	Dr. Neha Kumari	nehakumari401@gmail.com	A Study To Estimate The Prevalence Of Pulmonary Hypertension In Patients Of Chronic Obstructive Pulmonary Disease At A Tertiary Care Centre
EP 102	Gera Eunice	eunicegera60@gmail.com	Evaluation Of Correlation Of Novel Index, Bodexs90 With Health Related Quality Of Life Among Stable Copd Patients
EP 103	Amit Kiran Rath	dr.amit.rath@gmail.com	Effects Of Gold-Guided Pharmacotherapy On Oscillometric Parameters In Patients With Stable COPD
EP 104	Dr Aishwarya Kishor Kedar	aishwaryakedar@yahoo.com	Granulomatosis With Polyangiitis (Wegener'S Granulomatosis): An Uncommon Case Presentation
EP 105	Saket Sharma	sschest@gmail.com	Hypereosinophilic Syndrome
EP 106	Subhalekshmi	subhalekshmidinesh@gmail.com	Airway Obstruction In Bronchiectasis And Its Association With Various Parameters
EP 107	Sumanth Kumar Chirimarri	chirimarrisumanth@gmail.com	A Case Of B/L Aspergilloma
EP 108	Saurabh Patil	saurabh.patil@glenmarkpharma.com	A Drug Utilization Study To Evaluate The Use Of Mometasone Furoate/Indacaterol Acetate Dpi (Ics/Ulaba) At Various Chest Clinics Across India: Results From Interim Analysis
EP 109	Sharon Anna Sam	sharonannasam@gmail.com	A Cross-Sectional Study Of Clinical, Radiological, Electrocardiographic And Echocardiographic Profile In Patients With Stable Chronic Obstructive Pulmonary Disease At A Tertiary Care Centre In Telangana
EP 110	Khyati Garg	dr.khyatigarg.aiims@gmail.com	Young Girl With Bronchiectasis: A Case Of Double Trouble
EP 111	Niranjan Prabhu Ss	drniranjanpharm@gmail.com	Efficiency Of Telemedicine Services In Managing Chronic Respiratory Illnesses
EP 112	Dr Athulya S	athulyasudheendranath1992@gmail.com	Occurrence And Course Of Bronchiectasis In Copd Category E And Its Impact On Clinical Outcomes
EP 113	Dr.Moniish	moniishmoni@gmail.com	Understanding The Occurence And Contributing Factors Of Chronic Pulmonary Aspergillosis During Acute Exacerbations In Copd Patients
EP 114	Srikar Gvm	srikar.gvm@gmail.com	Evaluation Of Mid Expiratory Flow Rate (Mefr) Among Asymptomatic Tobacco Smokers And Healthy Nonsmokers As A Marker Of Early Small Airway Obstruction
EP 115	R Arun Kumar	arunkumarrasukatchula@gmail.com	Prevalence Of Osteopenia And Osteoporosis In Patients With Chronic Obstructive Pulmonary Disease (COPD)
EP 116	Ravinder Singh Dhillon	dr.ravinder61@gmail.com	Late Presentation Of Unilateral Pulmonary Aplasia In Adulthood: A Case Report
EP 117	Syeda Tasneem Begum	syedatasneem506@gmail.com	Spontaneous Pneumomediastinum In Acute Severe Asthma
EP 118	Balram Chouhan	balramchouhan6.bc@gmail.com	A Study On The Predictors Of Mortality In Acute Exacerbation Of Chronic Obstructive Pulmonary Disease Using Dyspnea, Eosinopaenia, Consolidation, Acidemia And Atrial Fibrillation Score (Decaf) In Tertiary Care Hospital
EP 119	Dhara Thakrar	dharathakrar1@gmail.com	Prevalence And Predictors Of Suboptimal Pifr In Patients With Copd
EP 120	Dhara Thakrar	dharathakrar1@gmail.com	Preserved Ratio But Impaired Spirometry (Prism): Are These Subjects Different?
EP 121	Dr Aneeket Rastogi	rastogianee211@gmail.com	Assessment Of Lung Function Parameters Of Impulse Oscillometry In Chronic Obstructive Pulmonary Disease Patients At A Tertiary Care Centre

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 122	Dr. Rajendra Saugat	rajendrasogat@gmail.com	Evaluation Of Techniques Of Inhalation Devices Among Patient Of Copd And Bronchial Asthma
EP 123	Ronak Panwala	ronakpanwala@lupin.com	To Understand Burden Of Group E Copd Patients And To Gain Feedback Fluticasone + Fomoterol + Glycopyrronium Sitt: Survey From 292 Pulmonologists From India
EP 124	Saladi Suma	sumasaladi15@gmail.com	Tracheobronchopathia Osteochondroplastica: A Rare Case Report
EP 125	Mehvish Mushtaq	mehvish61.mushtaq@gmail.com	Prevalence Of Depressive Disorder In Asthma Patients As Seen In Outpatient Facility Of A Tertiary Care Hospital In Kashmir
EP 126	Gokul Bathe	gokulbathe@gmail.com	Dapsone Hypersensitivity Syndrome With Hypersensitivity Pneumonitis: A Rare Life-Threatening Complication Of Dapsone Therapy
EP 127	Dhruv Talwar	dhruv.talwar2395@gmail.com	Small Airways Involvement In Severe Asthma: How Common And Its Implications ?
EP 128	Adipudi Subrahmanya Sairam	sairam.dbgt@gmail.com	Assessment Of Bronchiectasis With Correlation Of Bsi And Sgrq In Tertiary Care Hospital
EP 129	Sai Chakravarthy	saichakravarthyb@gmail.com	A Study On Anatomical Variations In Tracheobronchial Tree As Visualised By Fibre Optic Bronchoscopy At A Tertiary Care Centre
EP 130	Anjana G	aasmi1am@gmail.com	Role Of Anxiety In Patient Intolerance During Diagnostic Bronchoscopy
EP 131	Kondamudi Sri Harsha	sriharsha0828@gmail.com	A Rare Case Of Airway Fibroepithelial Polyp
EP 132	Dr.Rushita Nakarani	rushitanakarani@gmail.com	Fiberoptic Bronchoscopy In Non-Resolving Pneumonia: Insights From A Case Series Emphasizing Diagnostic Value And Treatment Implications
EP 133	Dr Kauser Shaikh	kjabeensk29@gmail.com	Foreign Body Leading To Bronchiectasis
EP 134	Mohanakrishnan.D	mohankrisdeiv@gmail.com	Right Upper Lobe Quadripartite Pattern Of Bronchial Division
EP 135	Dr Kaumudi Devi	kaumudidevi12@gmail.com	Firing Into The Future, Thulium Fiber Laser Therapy: A Novel Tool For Management Of Central Airway Obstruction
EP 136	Swati	swati.jsr.21@gmail.com	Feasibility Of Oxygen Supplementation Via Bain'S Circuit In Patients Undergoing Flexible Fiberoptic Bronchoscopy For Diagnostic Purposes
EP 137	Rama Prasad Chowdhury	chowramaprasad412@gmail.com	Role Of Fiberoptic Bronchoscopy In Undiagnosed Exudative Pleural Effusion
EP 138	Sai Chakravarthy	saichakravarthyb@gmail.com	Anatomical Variations In Tracheobronchial Tree As Seen In Fiber Optic Bronchoscopy
EP 139	Vijayasurthe S	vijayasruthys@gmail.com	Endobronchial Ultrasound Guided Mediastinal Cryobiopsy: A Puzzle Breaker In Diagnosis Of Extra Pulmonary Tuberculosis
EP 140	Susayan Konar	susayankonar2014@gmail.com	Medical Thoracoscopy In Undiagnosed Pleural Effusion: Initial Experience From A Tertiary Care Hospital Of Eastern India
EP 141	Kaumudi Devi	kaumudidevi12@gmail.com	The Rare But Necessary: Defining The Entity Of Complex Airway Foreign Body
EP 142	Kaumudi Devi	kaumudidevi12@gmail.com	An Unusual Case Of Tracheo-Bronchial Nodules: Bronchus Associated Lymphoid Tissue Lymphomas,"All That Glitters Is Not Gold"
EP 143	Ponpandy Sivasubramanian	psiva485@yahoo.in	The Clinical And Radiological Outcome Of Repeated Needle Thoracocentesis Vs Pigtail Drainage In Patients With Massive Pleural Effusion : A Comparative Study
EP 144	Promoshi Podder	promoshipodder39@gmail.com	A Study On Evaluation Of Efficacy Of Ultrasound Guidance Versus Ct-Guidance For Peripheral Lung Mass
EP 145	Muthu Pandian M	drmuthupandianmm@gmail.com	Vats: Keyhole Surgery With Foreseeable Future
EP 146	Mandam Lavanya	mandamlavanya1@gmail.com	Role Of Endobronchial Ultrasound (Ebus) In Evaluation Of Hoarseness Of Voice In 28-Year-Old Non Smoker Male

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 147	Parthiban.D	parthidev5889@gmail.com	The Therapeutic Role Of Flexible Bronchoscopy In Foreign Body Aspiration In Children
EP 148	Podalakuru Prasanth	podalakuruprasanth59@gmail.com	A Case Of Calcified Aspergilloma, Beyond Radiology
EP 149	Arvind	aryan.arvind01@gmail.com	Bronchoscopic Evaluation Of Lung Mass In Northen Uttar Pradesh
EP 150	Preethu P T	preethu2k10@gmail.com	Sometimes Its Wiser To Seek The Uncommon
EP 151	Priyanka Parthiban	priyanka3priya9@gmail.com	Lung Transplant For Aspiration Pnuemonia With Severe Ards On Vv-Ecmo For 52 Days In A 78-Year-Old Male
EP 152	Fathima Jabbar	fathima_jabbar@yahoo.com	Salinothorax: A Rare Complication Of Whole Lung Lavage
EP 153	K.Rajamani	drrajikasi97@gmail.com	Role Of Balloon Bronchoplasty In A Fibrostenotic Type Of Endobronchial Tuberculosis
EP 154	Kauser Mohd Yaseen Shaikh	kjabeensk29@gmail.com	Lost And Found
EP 155	Sugu Raj	sugu859@gmail.com	Chest Wall Lumps: An Interesting Case Series
EP 156	Smrithi	smrithi.ssp@gmail.com	The Efficacy Of 1 Percentage Versus 2 Percentage Lignocaine Solution Administered By Working Channel " Method For Topical Anesthesia In Flexible Bronchoscopy Without Administration Of Concurrent Lignocaine Nebulization - One Year Rct"
EP 157	Dr Kaumudi Devi	kaumudidevi12@gmail.com	A Breach In The Lifeline: A Case Of Iatrogenic Life-Threatening Tracheo-Bronchial Injury
EP 158	Dr. Veena Charishma Rp	veenacharishma95@gmail.com	Flexible Bronchoscopy To Rescue In Critically Ill Patients In Intensive Care: A Prospective Study
EP 159	Aiswarya	aiswaryaabi20@gmail.com	Exploring Breath-Holding Time And Pefr As Surrogate Tests For Lung Function Correlation With Standard Spirometry: Non-Technician Dependant Approaches
EP 160	Jaladi Paul Rahul Ephraim	rahul3094@gmail.com	A Rare Case Of Calcified Aspergilloma Visualized Through Bronchoscopy
EP 161	Mare Kusuma	kusumamare123@gmail.com	By Using Modified Radius Protocol: Rapid Bedside Evaluation Of Acute Dyspnoea In Er
EP 162	Ruttala Akhila	akhila.ruttala19@gmail.com	Diagnostic Role Of Pleural Biopsy In Exudative Pleural Effusion
EP 163	Brijesh Kumar Saini	brijeshajitgarh@gmail.com	Role Of Bronchoscopic Transbronchial Lung Biopsy In Ards
EP 164	Chandaluri S.V.N.S. Pujith	sai.poojith1@gmail.com	A Curious Case Of Missing Tooth And Its Implications For A Pulmonologist
EP 165	Yasir K	yasir11737@gmail.com	Case Of Foreign Body Aspiration Managed Via Rigid Bronchoscopy
EP 166	Anas S R	sranas07@gmail.com	Case Of Tracheal Stenosis Managed By Balloon Dilatation And Mitomycin C
EP 167	Sanjai	drsanjai8.7@gmail.com	Unblocking Breath And Reclaiming Resilience
EP 168	Unnikrishnan R	unnikrishnankrish003@gmail.com	A Comparative Study On Management Of Hemoptysis With Bronchoscopic Administration Of Adrenaline And Tranexamic Acid In A Tertiary Care Hospital
EP 169	Prerna Galhotra	premagalhotra@gmail.com	Usefulness Of Virtual Bronchoscopic Navigation For Sampling Of Bronchoalveolar Lavage: A Pilot Study
EP 170	Dr.V.Snigdha	snigdhavuduthala01@gmail.com	Pen Cap In Peadiatric Airway
EP 171	Gangadhara Srivani	srivanigangadhara@gmail.com	Blood Clot Obstructing The Airway
EP 172	Gaddam Saranya	saranyagaddam18@gmail.com	Migrating Foreign Body In The Airway
EP 173	V.Snigdha	snigdhavuduthala01@gmail.com	Role Of Medical Thoracoscopy In Multi-Loculated Effusions And Empyema
EP 174	R. Grace Jyoshtna	gracejyotshna337@gmail.com	Diagnostic And Therapeutic Utility Of Mini Rigid Thoracoscope In A Tertiary Care Centre

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 175	Dr.Pradyut Waghray, Dr.Venkateswara Reddy Tummuru	srivanigangadhara@gmail.com	Role Of Thoracoscopy Guided Pleural Biopsy, Pleural Brushing And Fnac (With Tbn Needle If Large Lesions Are Seen) In Undiagnosed Exudative Pleural Effusions
EP 176	Dr Kaumudi Devi	kaumudidevi12@gmail.com	Unusual Presentation Of Sarcoidosis
EP 177	Kedika Anudeep Reddy	kareddy894@gmail.com	Tracheal Schwannoma: A Rare Tumour Of Upper Airway
EP 178	Siri Mounish M	sirimounishreddy@gmail.com	A Case Of Non Resolving Pneumonia
EP 179	Palasani Maheswara Reddy	maheshrdybcd@gmail.com	Clinico-Pathological Profile Of Endobronchial Lesions
EP 180	Kedika Anudeep Reddy	kareddy894@gmail.com	Mini Bal Vs Bronchoscopic Bal
EP 181	Dr.Ajaysing Ravindrasing Rajput	buntyrajput1234053@gmail.com	A Curious Case Of Recurrent Cough
EP 182	Bana Mary Manishaa	manishaareddy97@gmail.com	A Rare Case Of Drug-Induced Interstitial Pneumonitis In Metastatic Breast Carcinoma: A Pulmonologist'S Perspective
EP 183	Sinchu Marium Philip	sinchumarium@gmail.com	An Elderly Women With Uncommon Presentation Of Granulomatosis With Polyangiitis.
EP 184	Sibi Sam	sibisam91@gmail.com	Polymyositis, With Mercy On Muscles !
EP 185	Sourav Mukherjee	sourav_ronti@yahoo.co.in	An Uncommon Cause Of Non-Healing Surgical Wound
EP 186	Dr. Adhul A Salam	adhul2121@gmail.com	Uncommon Presentation Of Granulomatosis With Polyangiitis
EP 187	Sujeet Rajan	skrajan@hotmail.com	Usage Of Antifibrotics In The Management Of Pulmonary Fibrosis In India
EP 188	Mohammad Sameer	md.sameer307@gmail.com	Spectrum Of Ctd Related Ild
EP 189	Muskan Gollen	muskangollen8909@gmail.com	A Rare Case Of Organising Pneumonia Mimicking Tuberculosis In Tb Endemic Areas
EP 190	Krishnapriya S. Kumar	krishna.skumarpriya@gmail.com	Interstitial Lung Diseases In Psoriasis: A Case Series
EP 191	Dia Zechariah	diazechariah999@gmail.com	Utility Of Exhaled Nitric Oxide In The Diagnosis Of Interstitial Lung Disease
EP 192	Chayanika Mandal	chayanikakonna@gmail.com	An Unusual Cause Of Dyspnoea In A Patient With Post Tuberculous-Destroyed Lung
EP 193	Sruthi Priyadarsini.S	sruthipriyadarsini77@gmail.com	A Case Of Bleomycin Induced Interstitial Lung Disease
EP 194	C.Sai Harini	Harinisai227@gmail.com	Clinicoradiological Profile Of Connective Tissue Disease: A Prospective Observational Study
EP 195	Rakshana S	rakshanasriram3@gmail.com	Afop: A Rare Case Of Non-Resolving Pneumonia
EP 196	Dr.Sake Vasavi Sai	saivasavi2611@gmail.com	Bridging Clots And Convulsions: Decoding A Complex Medical Odyssey
EP 197	Shilpa K V	drshilpavishnu@gmail.com	Granulomatous Mediastinal Adenopathy With Multi System Involvement- A Diagnostic Dilemma
EP 198	Dr. Humaira Hanif (Pt)	humyhanif05@gmail.com	Feasibility Of Home-Based Pulmonary Rehabilitation For Individuals With Idiopathic Pulmonary Fibrosis In Delhi, India
EP 199	Naveen Alli	drnvn09@gmail.com	Azygos Lobe: A Rare Anomaly Of Lung
EP 200	Dr Shilpa K V	drshilpavishnu@gmail.com	Granulomatous Mediastinal Adenopathy And Multi System Involvement- A Diagnostic Dilemma
EP 201	Balasubramanian V	balasm1610@gmail.com	Pulmonary Artery Embolism Due To Migration Of N-Bca Glue As A Complication Of Av Malformation Treatment
EP 202	Christie George Joseph	christiegeojoseph@gmail.com	Effect Of Home-Based Pulmonary Rehabilitation In Patients With Interstitial Lung Diseases In A Tertiary Care Centre: A Randomized Controlled Trial

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 203	Manasa L	manasal97@yahoo.in	Predictors Of Venous Thrombotic Events In Patients With Chronic Respiratory Disease In A Tertiary Care Centre: A Case Control Study
EP 204	Karnati Sanjana Shiny	shinyasanjana3@gmail.com	A Clinico-Radiological Study Of Diffuse Parenchymal Lung Diseases In A Tertiary Care Hospital
EP 205	Siva.S	s.siva465@gmail.com	A Rare Presentation Of Acute Interstitial Pneumonia (Aip) In 10-Year-Old Boy
EP 206	B.Sravya	sravyareddy.bojja@gmail.com	Antisynthetase Syndrome In Young Adult: A Rare Presentation Of A Rare Disease
EP 207	Vattamwar Sreenija	nijavattamwar@gmail.com	Hypogenetic Lung Syndrome In A Young Adult Presenting As Isolated Pah
EP 208	B.Sravya	sravyareddy.bojja@gmail.com	Anti Synthetase Syndrome In Young Adult: A Rare Presentation Of Rare Disease
EP 209	Sruthi Priyadarsini.S	sruthipriyadarsini77@gmail.com	A Case Of Bleomycin Induced Ild
EP 210	Deasini Das	deasini29@gmail.com	Sarcoidosis: The Great Masquerader
EP 211	Shaik Sameer	sameershaikng@gmail.com	An Interesting Case Of Non Resolving Pneumonia
EP 212	Divya Malle	dr.divyapulmonology@gmail.com	Birt-Hogg-Dubé Syndrome
EP 213	Jadav Sravanthi	sravjadav33@gmail.com	Longterm Follow Up Of Lymphangioleiomyomatosis(Lam) On Sirolimus
EP 214	Sagar	sagarmelkundi555@gmail.com	A Rare Case Of Pulmonary Langerhans Cell Histiocytosis: A Case Report
EP 215	Sabna	shabnanazer7@gmail.com	Solving Mystery Of Chronic Anemia In A 14-Year-Old Girl
EP 216	V Raajitha	vayyala.raajitha@gmail.com	Combined Pulmonary Fibrosis With Emphysema
EP 217	V.Moniish	moniishmoni@gmail.com	Paraquat Poison Induced Lung Fibrosis
EP 218	Nazia Sultana	doc.nazia5@gmail.com	Pulmonary Langerhans Cell Histiocytosis Masquerading As Miliary Tuberculosis
EP 219	Deboprasad Das	dr.deboprasad@gmail.com	Thrombophilia In A Patient Of Rheumatoid Arthritis Presenting With Hemoptysis
EP 220	Arijit Datta	arijtd20@gmail.com	A Case Of Pulmonary Renal Syndrome
EP 221	Dr. Mohan Venkataraman	veem2000@hotmail.com	A Challenging Case Of Post Covid Complications
EP 222	Ganesh Kumar	gani8451@gmail.com	Plch Presenting As Military Mottling In An Elderly Male
EP 223	Dr Gadusatla Shivani	drshivanireddy08@gmail.com	Migrating Thrombus Masquerading As Right Atrial Mass
EP 224	Vasudevan A	Vaasuu01@gmail.com	A Case Of Hermansky - Pudlak Syndrome
EP 225	S.Sameera Gulshan	sameeragulshan25@gmail.com	A Rare Case Of Lymphangioleiomyomatosis
EP 226	Afshan Ali Shaik	afshanshaik68@gmail.com	A Case Of Idiopathic Form Of Diffuse Complex Pulmonary Av Malformation
EP 227	Reddy Bhargavi	bhargavi99r@gmail.com	A Rare Case Of Non Familial Idiopathic Pulmonary Fibrosis In A Young Male Athlete
EP 228	Sharan Kumar	sharan.kumaar@gmail.com	A Rare Case Of Rheumatoid Arthritis Presenting As Nsip From Tertiary Care Teaching Hospital: A Candidate For Lung Transplant
EP 229	Monojit Mukherjee	monojit708@gmail.com	An Unusual Case Of Sarcoidosis Mimicking Cutaneous Malignancy And Coexisting With Pulmonary Tuberculosis
EP 230	Utkarsh Suyal	utkarsh.suyal.1993@gmail.com	Thromboelastography- A Helpful Tool In The Diagnosis And Management Of Hemoptysis
EP 231	Pranathichandra Kanchanapally	pranathichandra208@gmail.com	Primary Pulmonary Hypertension Counterfeiting As Bronchial Asthma
EP 232	Vandana.K	vandanakulai25@gmail.com	Who Caused The Pulmonary Embolism
EP 233	Dr Arun Balan	drarunbalanvp@gmail.com	Trans-Bronchial Lung Biopsy, Game Changer In A Case Of Idiopathic Pulmonary Hemmorage With Pulmonary Hemosiderosis

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 234	Thanigaiarasu N	thanigai.21@gmail.com	A Case Report On Rheumatoid Arthritis Associated Interstitial Lung Disease In A Patient Incidentally Diagnosed With Poland Syndrome
EP 235	Islahuzzama Salahuddin Ansari	ansarizama19921992@gmail.com	An Uncommon Presentation Of Common Connective Tissue Disease
EP 236	Puneet Kaur	kaurpuneet7418@gmail.com	Hypersensitivity Pneumonitis
EP 237	Namrada Prabhakar	namrada.p@gmail.com	Ph Doesn'T Equal Pah
EP 238	Greeshma Jomy	greeshmajomy93@gmail.com	C Anca Negative Vasculitis
EP 239	Itishree Singh	itishreesingh94@gmail.com	Congruence Between Clinical, Radiological, Physiological And Functional Parameters In Ild: A Single-Centre, Prospective Study
EP 240	Ranjith Kumar S	drranjithkumar2609@gmail.com	Tuberculosis To Be Or Not To Be
EP 241	Dr. Veena Charishma Rp	veenacharishma95@gmail.com	Case Of A Young Male With Unprovoked Acute Pulmonary Thromboembolism In Absence Of Dvt
EP 242	Dr.Akhila Prasad	akhilaprasad324@gmail.com	A Case Arc Welders Pneumoconiosis Overlapping With Ctd Ild
EP 243	Saket Sharma	sschest@gmail.com	Neurosarcoidosis Threatening Vision
EP 244	Tangella Rajeev	rajeevtangella977@gmail.com	Unveiling Complexity: Navigating Granulomatosis With Polyangiitis
EP 245	M.Sushmitha	sushmithamarni@gmail.com	Combined Pulmonary Fibrosis And Emphysema
EP 246	Aheli Sen	ahelisen95@gmail.com	Cpfe An Unique Entity
EP 247	Gera Eunice	eunicegera60@gmail.com	Carrington'S Disease And Rheumatoid Arthritis: An Unusual Association
EP 248	Megha Varghese	megha.susanvarghese@gmail.com	Lung Nodules In A Young Male Can Be Inflammatory Too
EP 249	Vuduthala Likhitha	likhitha.patel99@gmail.com	Wegeners Granulomatosis
EP 250	Rajat Kumar Mishra	rajatmishra213@gmail.com	Connecting The Dots: How Anti PI-12 Relates To Antisynthetase Syndrome And Ild
EP 251	Archana T C	tcarchana1@gmail.com	Acute Pulmonary Hypertension Due To Rupture Of Sinus Of Valsalva
EP 252	Murli Dhar Saini	murlidharims@gmail.com	Sarcoid Surprise: Neurosarcoidosis Masquerading As Benign Intracranial Hypertension- A Rare Case Presentation
EP 253	Karthik B	karthik13121997@gmail.com	Unraveling Complexity: The Diagnostic Odyssey Of Pulmonary Fibrosis In Dyskeratosis Congenita And Its Multifaceted Manifestations
EP 254	Kritika Garg	kritikagarg556@gmail.com	A Rare Case Of Granulomatosis With Polyangiitis With Pulmonary Nodule With Non Bacterial Thrombotic Endocarditis With Rapid Progressive Glomerulonephritis
EP 255	Nilkanthchandra S Chaudhari	cnilkanth6@gmail.com	Dilemma Of All Time: Tuberculosis Vs Sarcoidosis
EP 256	Ratesh Buhlan	narutoratesh@gmail.com	Organizing Pneumonia As An Early Indicator Of Systemic Sclerosis: A Rare Case Presentation
EP 257	Dr. Muthu Nageswar Ganapathy	gspmnageswar@gmail.com	Lymphoid Interstitial Pneumonia As An Initial Presentation In Sjögren Syndrome
EP 258	Satyajit Acharya	satyajitacharya73@gmail.com	Unilateral Dah: A Rare Presentation Of Microscopic Polyangiitis
EP 259	Hrishikesh Vishnu Gaikwad	hrishikeshg8310@gmail.com	Systemic Sclerosis With Interstitial Lung Disease
EP 260	Guha Preetha. S	preethabsk103@gmail.com	Pulmonary Capillary Hemangiomatosis
EP 261	Harshalkumar Ital	harshalital3012@gmail.com	Anca Negative Granulomatosis With Polyangiitis
EP 262	Dr.Preetham Napa	preetham.fed@gmail.com	Case Report Of Granulomatous Polyangiitis (Wegener'S Granulomatosis): Necrotising Granulomatous Inflammation Misinterpreted As Tuberculosis

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 263	M A Sohail Shaheri	sohailshaheri15@gmail.com	Bleeding Disorder Of Platelets Type 15 And Pulmonary Arterial Hypertension: A Rare Case Report
EP 264	Mehvish Mushtaq	mehvish61.mushtaq@gmail.com	Potential Role Of Antifibrotic Agents In Post Covid 19 Lung Fibrosis
EP 265	Kotagiri Sai Chandana	chandana.kotagiri@gmail.com	A Case Report Of Drug Induced Dle In Patient Of Pulmonary Tuberculosis With Mctd
EP 266	G.S.K Ravikanth	ravikanth.g.s.k@gmail.com	An Unusual Case Of Interstitial Lung Disease In Pregnancy
EP 267	Arpit Pandey	ARPITP053@GMAIL.COM	Efficacy Of Ultrasound Guided Biopsy In Lung Masses In A Tertiary Care Center: A Case Series
EP 268	Sharada Vinod Kutty	sharada.vinod@gmail.com	Outcomes Of Non-Specific Pleuritis In Patients With Undiagnosed Exudative Pleural Effusion At A Tertiary Care Center
EP 269	Hari Priya Reddy Kothapally	k.haripriyareddy9@gmail.com	Diagnostic Utility Of Cancer Ratio And Cancer Ratio Plus In Etiological Diagnosis Of Exudative Pleural Effusions
EP 270	Dr. J Neha Sree	neharaodr@gmail.com	Osteosarcoma With Lung Mets
EP 271	V. Vani Vineela	vanivineela.vegunta@gmail.com	A Case Report Of Small Blue Round Cell Tumour (Mediastinum)
EP 272	Shermila P C	shermila1993@gmail.com	A Case Report On Recurrent Squamous Cell Carcinoma
EP 273	Vadde Vijaya Lakshmi	vijichowdary6@gmail.com	When Asthma Isn'T Asthma: The Diagnostic Challenge Of Bronchial Carcinoid Tumor
EP 274	Dr Eada Chaithanya	dr.chaitueada@gmail.com	Pulmonary Spindle Cell Carcinoma: A Rare Case Report
EP 275	Kriti Sarin	kritisarin13@gmail.com	Imaging Of Lung Cancer And Its Correlation With Histopathological Diagnosis In Tertiary Care Center In North India
EP 276	Aashish Swaraj	guptaashish.in@GMAIL.COM	Atypical Presentaion Of Adenocarcinoma Of Lung
EP 277	Karthik B	karthik13121997@gmail.com	Metastatic Adenocarcinoma Of Lung Masquerading As Interstitial Lung Disease: A Diagnostic Difficulty
EP 278	Dr. Shree Dhanusha. D	shreedhanushad@gmail.com	Pneumonic-Type Non-Mucinous Adenocarcinoma Of Lung Presenting With Progressive Respiratory Failure: A Case Report
EP 279	Mohammed Sameer Kundale	sameer.kundale@gmail.com	A Case Of Bilateral Diffuse Cystic Lung Disease
EP 280	S M Ahmed	fromahm9@gmail.com	An Atypical Presentation Of A Carcinoma
EP 281	Koustav Raychoudhury	koustav.1120@gmail.com	Choroidal Metastasis As An Initial Presentation Of Primary Lung Adenocarcinoma
EP 282	Vijay Kumar	vijay.imsbhu09@gmail.com	Pancoast Tumor Manifesting As Myositis With Muscle Atrophy And Arthralgia: A Rare Case Report From North India
EP 283	Shridevi H.N	Shridevih2@gmail.com	Thoracoscopic Mirage-Case Report On Malignant Pleural Nodules Mimicking As Tuberculosis
EP 284	Dr Sabna	shabnanazer7@gmail.com	A Confusing Mediastinal Mass
EP 285	Swati	swati.jsr.21@gmail.com	Hydatid Cyst- The Pulmonologist'S Clickbait
EP 286	Nirantha Sp	nirantha.sp@gmail.com	Squamous Cell Lung Carcinoma With Chronic Pulmonary Aspergillosis: A Rare Co-Existence Presenting As Double Trouble
EP 287	Reuben Jacob	thekkumkattilreuben1997@gmail.com	A Rare Case Of Hypertrophic Pulmonary Osteoarthropathy In Co-Existent Non-Small Cell Lung Carcinoma And Pulmonary Tuberculosis
EP 288	Beauty Prasad R	beautyprasadr@gmail.com	Bewildering Nodules In A Radiological Dilemma: A Quest Of Gleam And Hue
EP 289	Dr.Moniish	moniishmoni@gmail.com	Malignancy Mimicking Pneumonia

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 290	Amritha A S	amrithasivasankeroo7@gmail.com	Unveiling The Diagnostic Odyssey Of Svc Syndrome
EP 291	Harsha	harshacmurthy777@gmail.com	Case Report On Adenocarcinoma In Situ Fight Hard But Breathe Easy
EP 292	Smrithi S Prabha	smrithi.ssp@gmail.com	Rare Presentation Of Adenocarcinoma Of Lung As Pulmonary Thromboembolism
EP 293	K.R.Lavanya	lavanyaramappa64@gmail.com	Lung Adenocarcinoma With Paraneoplastic Eosinophilia With Liver Metastasis
EP 294	Rohit Kumar Mishra	mishrarohit099@gmail.com	Carcinoid Syndrome
EP 295	Amith A	amithmbbs01@gmail.com	A Rare Case Of Lung Aplasia
EP 296	Supriya Mallick	supriyamallick976@gmail.com	Diffuse Pulmonary Menigotheliomatosis- An Orphan Multinodular Lung Disease
EP 297	Susayan Konar	susayankonar2014@gmail.com	A Rare Case Of Peripheral T-Cell Lymphoma Not Otherwise Specified Presenting As Endobronchial Lung Mass
EP 298	Tangella Rajeev	rajeevtangella977@gmail.com	Neuroendocrine Tumor Of Lung In Pediatric Age Group: A Rare Presentation
EP 299	Vishal Prajapati	drvishalprajapati99@gmail.com	A Case Report Of Primary Effusion Lymphoma
EP 300	Rama Mourya	mourya.rama111@gmail.com	A Case Of Atypical Lung Neuroendocrine Tumour With Mediastinal Mass
EP 301	Prathyusha Koritala	prathyukoritala@gmail.com	Mesenchymal Stem Cell Therapy In Paraquat Lung
EP 302	Chinthakindi Shraavan Kumar	shravyachin@gmail.com	A Silent Journey Of Lung Carcinoma
EP 303	Pradeep Jeevaram.G	pradeepjeevaram@gmail.com	An Interesting Case Of Salivary Gland Tumour Of The Lung
EP 304	Pradeep Jeevaram.G	pradeepjeevaram@gmail.com	Lung Carcinoma Mimicking As Non Resolving Pneumonia
EP 305	Aswini Mohan	tgmachus@gmail.com	Solitary Squamous Papilloma Of Trachea: A Rare Airway Tumour
EP 306	Dr.Ch.Nidhi Sumedha	nidhisumedha1415.1@gmail.com	A News Worthy Case Of Primary Pulmonary Malignancy - An Off The Beat Presentation Ewing'S Sarcoma
EP 307	Karthickeyan V	KARTHICK6091@gmail.com	A Rare Case Of Malignant Synovioma Of Lung
EP 308	Swapnamoy Ghosh	swapnamoy96prince@gmail.com	Cystic Lung Disease With Lung Cancer
EP 309	Vaishnavi.N	vaishnavidr16@GMAIL.COM	Solitary Fibrous Tumor In A Rare Site
EP 310	Pradeep Naik G	drpradeepgnaik@gmail.com	Thoraco Pulmonary Ewing'S Sarcoma In A Lactating Mother: A Rare Case Report
EP 311	Cheedella V H N Sandhya	mesandya94@gmail.com	Mediastinal Mass Presenting As Superior Venacaval Syndrome From Tertiary Care Institute
EP 312	Thipperishetty Shravya	shravyashetty495@gmail.com	Case Series: Cystic Transformation Of Cannon Ball Metastases
EP 313	Krishna Gopika Gopalakrishnan	krishnagopikagopalakrishnan@gmail.com	Co-Existence Of Pulmonary Tuberculosis And Lung Malignancy: A Case Series
EP 314	Shemi P	shemiahammed9@gmail.com	Small Cell Lung Cancer Presenting As Hyponataemia
EP 315	Najma.N	najmanalakath79@gmail.com	Hodgkins Lymphoma Presenting As Lung Mass
EP 316	Kowsalya Devi	devidinesh95@gmail.com	A Rare Case Of Primary Malignant Melanoma Of Lung
EP 317	R. Anushna Varunavi	varunavi97@gmail.com	A Rare Case Of Pulmonary Carcinoid Tumor With Concomitant Ptb In A Bronchiectatic Lung
EP 318	Dr Divya Chunchu	divyachunchu95@gmail.com	Second Primary Malignancy
EP 319	Tangella Rajeev	rajeevtangella977@gmail.com	Neuroendocrine Tumor Of Lung In Pediatric Age Group: A Rare Presentation
EP 320	Saranya J	drsaranyaj@gmail.com	Palmistry In The Diagnosis Of Lung Malignancy
EP 321	Rashid Anvar Ck	rashidanvarck123@gmail.com	A Case Of Bronchorrhea Giving Clue To The Diagnosis

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 322	Frentzen R	rgfrentzen@gmail.com	An Unpleasant Surprise: A Rare Case Of Primary Pulmonary Synovial Sarcoma (Ppss)
EP 323	Dr Anvesh D	anveshd05@gmail.com	A Case Of Intrapulmonary Mature Teratoma
EP 324	Randeep Singh	docrandeep@gmail.com	A Case Of Pleural Small Cell Carcinoma On Thoracoscopic Pleural Biopsy Without Pulmonary/Extra-Pulmonary Lesion
EP 325	Devika S Nair	devimed15@gmail.com	A Case Study Of Clinico-Radiological Profile Of Patients With Lung Cancer In A Tertiary Care Centre
EP 326	Shubham S Hatti	shubham.hatti@gmail.com	Endobronchial Lesions
EP 327	Dr . Mizbah Muzzain Syed	mizbahmuzzain@gmail.com	A Case Report Of Lung Malignancy Presenting As Lung Abscess
EP 328	Reddy Bhargavi	bhargavi99r@gmail.com	A Curious Case Of Dual Neoplasms
EP 329	Yasaswi Bevara	dryasaswibevara@gmail.com	A Case Report Of Primary Lung Cancer Without Lung Mass
EP 330	Mithila Paulson	mithilapaulson@gmail.com	Clinical, Radiological And Histopathological Profile Of Lung Cancer In Smokers And Never Smokers Visiting Tertiary Care Centre In South India
EP 331	Siri Vineeth Anuraag Ganta	vineethanuraag@gmail.com	Pleural Malignancy: A Rare Presentation
EP 332	Vivek P	vivekp28111992@gmail.com	A Rare Case Of Mucoepidermoid Carcinoma In A Young Boy
EP 333	Rhea Serah Suares	suares.rhea@gmail.com	Fungal Infection And Carcinoma Lung: A Perilious Symbiosis
EP 334	Madhurima Banoth	sitaramdm14@gmail.com	Solitary Fibrous Tumour, A Rare Tumor Of The Pleura: A Case Report
EP 335	A.Raja	rajaannadurai308@gmail.com	Primary Pulmonary Leiomyosarcoma
EP 336	Krishnapriya S	001krishnaatjnv@gmail.com	An Unusual Presentation Of Adenocarcinoma During Covid Pandemic
EP 337	Poulomi Sen	DR.PSEN299@GMAIL.COM	Atypical Radiological Presentations Of Adenocarcinoma Lung: A Case Series
EP 338	Mithila Paulson	mithilapaulson@gmail.com	Lung Cancer In Smokers And Never Smokers; Clinicoradiological And Histopathological Profile Of Patients Visiting Tertiary Care Centre In South India
EP 339	Ridhu Vakkachan	ridhuvakkachan@gmail.com	Barking Up The Wrong Tree: Unusual Presentation Of Lung Metastasis
EP 340	Sharad Prasad Dahal	sharadpdahal@gmail.com	Diagnostic Yield Of Gravity Based Diagnostic Thoracocentesis In Suspected Malignant Pleural Effusion (Gbtme): A Pilot Study
EP 341	Yash Jain	yjainon5@gmail.com	Bizarre Bony Dissemination Of A Lung Primary
EP 342	Ranjitha K R	ranjithakizhuveetil@gmail.com	Primary Pulmonary Rhabdomyosarcoma: A Rare Case Report Study
EP 343	Tangella Rajeev	rajeevtangella977@gmail.com	Neuroendocrine Tumor Of The Lung In Pediatric Age Group: A Rare Presentation
EP 344	Mohammed Sameer Kundale, Pragati Rao D, Ravinuthala	sameer.kundale@gmail.com	Clinico-Pathologic Study Of Pulmonary Neuroendocrine Tumors: A Retrospective Analysis
EP 345	Vidya B Nair	vdnair0@gmail.com	When All Roads Lead To Rome !
EP 346	Sameera Gulshan	sameeragulshan25@gmail.com	Pleural Effusion- A Dissimulation For Squamous Cell Carcinoma Of Lung In A Male Non Smoker
EP 347	A.Raja	rajaannadurai308@gmail.com	Atypical Carcinoid Tumor Of The Lung: A Rare Entity
EP 348	Yash Jain	yjainon5@gmail.com	A Stitch In Time, Saves Nine: How Early Intervention Leads To Better Outcomes
EP 349	Dr Gunti Yashwanth	yashwanthgunti050297@gmail.com	Iceberg Tumor - An Atypical Neuroendocrine Tumor Of Lung
EP 350	Dr.Sankari Prabha. A.P	sankariprabha97@gmail.com	Invasive Spindle Cell Thymoma In Anterior Mediastinum

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 351	Narayan Joshi	pulmdoctor4@gmail.com	Unusual Presentation Of Bronchoalveolar Carcinoma Mimicking Infectious Lung Disease
EP 352	Prakash S	sprakash1989@gmail.com	A Quinquennial Conundrum Of Non-Resolving Pneumonia
EP 353	Chinthnuru Shivani	chintanurushivani@gmail.com	A Rare Case Of Small Cell Neuroendocrine Carcinoma Of Lung
EP 354	Dipin S	drdipinofficial@gmail.com	Issacs Syndrome & Lung Adenocarcinoma- A Surprising Duo
EP 355	Akanksha Rani	akankshadear30@gmail.com	Humoral Hypercalcemia Of Malignancy Due To Paraneoplastic Syndrome Of Lung Squamous Cell Carcinoma As Medical Emergency
EP 356	Niraja Rath	nrath2020@gmail.com	A Tale Of Delayed Return Of Wilms Tumor And The Unexpected Challenges
EP 357	M Gowthami Priyanka	mgpriya19@gmail.com	A Rare Case Of Malignant Mesothelioma Without Asbestos Exposure Mimicking Adenocarcinoma
EP 358	Prajakta Mane	prajakta4518@gmail.com	Right Perihilar Squamous Cell Carcinoma Presenting As Solitary Pulmonary Nodule In An Asymptomatic Patient Without Any Comorbidities
EP 359	Archit Gupta	drarchit27@gmail.com	Case Series Of Ten Patients Diagnosed With Lung Cancer At Peripheral Health Institute Over A Period Of 1 Year
EP 360	Tamizharasan	tamizhmaasi@gmail.com	Adenocarcinoma Of Lung With Paraneoplastic Hypereosinophilia: A Rare Case Report
EP 361	Dr T Anantha Lakshmi	anushat.1108@gmail.com	Unveiling The Masters Of Camouflage
EP 362	Navaneethakrishnan J	naveenkrishnanj84@gmail.com	Shedding Light On Stealthy Intra-bronchial Carcinoid Tumor: Case Analysis
EP 363	Kshitij Bendale	xitijb01@gmail.com	Pleural Germ Cell Tumor Presenting As Pleural Mesothelioma
EP 364	Dr Paresh Chandra Mohanata	drparesh46@yahoo.com	Asymptomatic Intracranial Metastasis From Lung Adenocarcinoma In A Young Woman: A Case Report
EP 365	Sathya Prakash Sunkoori	mallugangadhar@rediffmail.com	Epithelioid Hemangioendothelioma In Lungs: A Rare Case Report
EP 366	Sompalli Sri Harshith	sriharshithram@gmail.com	Ewings Sarcoma Of Pleura
EP 367	Dr.Rachel.V	DRRACHELV2020@GMAIL.COM	Pulmonary Carcinoid With Concomitant Tb
EP 368	Dr Paresh Chandra Mohanta	drparesh46@yahoo.com	Primary Pulmonary Angiosarcoma In A Middle Age Female: A Rare Case Report
EP 369	Dr Priya Dharshini R.L	priyachandran1705@gmail.com	Review Of Anaplastic Lymphoma Kinase Positive Non-Small Cell Lung Cancer Patients Attending A Tertiary Care Centre In North India
EP 370	Dr Lakshmi Teja	tejaraogona@gmail.com	Benign Metastasizing Leiomyoma: A Case Report
EP 371	Sheelam Snehalatha	keethasnehalatha@gmail.com	Clinico-Radiological Spectrum Of Hemoptysis In Admitted Patients With Normal Chest X-Ray In A Tertiary Care Hospital
EP 372	Dr. Manasa Yeluri	nasa658@gmail.com	Predictive Value Of A Body Shape Index "In Lung Function"
EP 373	Sheena Mathew	emmathew74@gmail.com	Diagnostic Utility Of Fractional Exhaled Nitric Oxide (Feno) In Chronic Idiopathic Cough Assessment And Response To Inhaled Steroid Treatment: A Retro-Pro prospective Study
EP 374	K.Venugopal	dtovenu@gmail.com	Cue Based Intervention In A Tobacco Cessation Clinic
EP 375	Md Saddam Hossain	mdsaddam3435@gmail.com	A Case Of Heavy Heart And Even A Heavier Lung
EP 376	A. Keerthi Prakash	keerthifernando@gmail.com	Various Presentations Of Pulmonary Sequestrations
EP 377	Adwitiya Dutta	adwitiyadutta37@gmail.com	Pulmonary Neuroendocrine Tumour

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 378	Geddada Bhagya Saranya	geddadabhagyasaranya@gmail.com	One Storm Made Both The Heart And Diaphragm To Disappear
EP 379	Smrithi S Prabha	smrithi.ssp@gmail.com	Neglected Case Of Dyspnea In 38 Year Old: Congenital Diaphragmatic Agenesis
EP 380	Dr. Tai Gungtey	gungtey22@gmail.com	Patent Ductus Arteriosus: An Uncommon Cause For Hemoptysis In Adults
EP 381	Nisha Bopaiah K	nishabopaiah@gmail.com	Incidental Pulmonary Nodules Mimicking Malignancy
EP 382	Shanmukha Priya S	shanmukhasatuluri@gmail.com	Beyond The Veil Of Micronodules: Exploring A Rare Cause Of Diffuse Pleuro-Pulmonary Calcifications
EP 383	Manasa L	manasal97@yahoo.in	Persistent Type 2 Respiratory Failure Due To Myasthenia Gravis In An 18-Year-Old Boy: A Case Report
EP 384	Md. Wamique Izhar	wamique96izhar@gmail.com	Cystic Mystery: A Case Of Hemidiaphragmatic Eventration Mimicking A Lung Cyst
EP 385	Varna Chittumodu	chvarna69@gmail.com	Outcomes Of Patients With Paraquat Poisoning
EP 386	Malasree Jujjavarapu	malasreej96@gmail.com	Screening Of Welders For Respiratory Symptoms And Pulmonary Function Abnormalities In A Semi-Urban Area
EP 387	Krishnapriya S	001krishnaatjnv@gmail.com	A Rare Presentation Of Cervical Lymphadenitis Mimicking Tb Lymphadenitis
EP 388	Prathyusha Koritala	prathyukoritala@gmail.com	Mesenchymal Stem Cell Therapy In Paraquat Lung
EP 389	Shivangi Priyadarshani	0625sansha@gmail.com	A Case Of Rare Orphan Lung Disease Presenting As Cavitating Lung Mass: Igg4 Related Disease
EP 390	Nandini Ravula	reddynandini05@gmail.com	Silicoproteinosis
EP 391	Rathnakar Kusuma	rathnakarkusuma@gmail.com	A Mysterious Case Of Elevated Right Dome Of Diaphragm
EP 392	Vyshnavi Rajeev	vaishnavirajeev07@gmail.com	Study Of Clinico-Radiological And Etiological Profile Of Patients With Cavitary Lung Disease In A Tertiary Care Hospital
EP 393	Yogesh Kumar.A	AYOGESHK1134@GMAIL.COM	A Case Of Pulmonary Alveolar Microlithiasis
EP 394	Anna Jacob	annaannu@gmail.com	An Unusual Cause For Cervical Lymphadenitis
EP 395	Dr Suganthi	suganthisakthivel1995@gmail.com	A Case Report On Pleuroparenchymal Fibroelastosis: A Rare Entity
EP 396	Jaswanthkumar	jjaswanthkumar1@gmail.com	Unilateral Agenesis Of The Lung: A Rare Entity
EP 397	Swapnil Solanki	swapnil2895@gmail.com	Silicosis In A Patient Of Chronic Obstructive Pulmonary Disease
EP 398	Dr Vishal Shukla	VISHAL595.VS43@GMAIL.COM	Genetics & Hydropneumothorax: A Case Of Marfan'S Syndrome
EP 399	Muthu Pandian	drmuthupandianmm@gmail.com	Pigeon Fancier'S Disease; Antigen Diversity And Disease Implications: A Case Report
EP 400	Shreyas Adyanthaya B	shreyasadyanthaya71@gmail.com	Sarcoidosis Masquerading As Pulmonary Tuberculosis- How To Differentiate ?
EP 401	Raviteja	kadiri.raviteja65@gmail.com	Incidental Thrombosis In Respiratory Disorders
EP 402	Dr.K.Thirupathi	chennaipulmonologist@gmail.com	An Unusual Thoracic Complication Of Emergency Percutaneous Coronary Intervention (Pci)
EP 403	Srija Muttamsetty	srijamuttamsetty@gmail.com	Silicosis - More Than An Occupational Lung Disease
EP 404	Karnati Ramya	ramyakarnati8888@gmail.com	Seemed Miliary, Yet Differed As Pneumoconiosis
EP 405	Gowthami D C	manojkumarkb007@gmail.com	Invasive Aspergillosis In A Immunocompetent Host
EP 406	Pratima Dhurka	pratimadhurka2013@gmail.com	A Rare Case Of Broncho-Pulmonary Sequestration Masquerading As Non-Resolving Pnuemonia
EP 407	Pavani Chinnapaka	chinnapakap@gmail.com	Hepatobronchial Fistula Secondary To Liver Abscess: A Rare Complication

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 408	Chandana Edulapuram	chandana.e11@gmail.com	A Case Of Dual Fungal Infection In Immunocompromised Treated Successfully With Sensitive Antifungals
EP 409	Maheswari R	mahirajangam@gmail.com	Rifampicin Induced Pneumonitis: A Very Rare But A Possible Adverse Effect
EP 410	Komal Jharotiya	komaljharotiya61@gmail.com	When Observation Is The Treatment: A Case Report On Traumatic Pneumatocele
EP 411	Dinesh Reddy Kolli	medinesh@yahoo.co.in	Kartageners Syndrome: " We Saw What The Triad Has In It "
EP 412	Akhila Prasad	akhilaprasad324@gmail.com	Mediastinal Lipomatosis Causing Svc Compression In A Ild
EP 413	Aabid Shafi Wani	wani.abidshafi530@gmail.com	Outcomes Of Bronchial Artery Embolization For Life-Threatening Hemoptysis In Tertiary Care Hospital Of Northern India
EP 414	Dr Reshma K R	talex4925@gmail.com	Tale Of Puo: A Case Of Adult Onset Still'S Disease
EP 415	Sree Ram Sripadi	sripadisreeram@gmail.com	Miliary Nodules In The Lung- Not Always Tuberculosis: A Case Of Silicosis
EP 416	Harshith N	harshithhhh@gmail.com	The Pinkyway Galaxy
EP 417	Sucheta Aurora	sucheta2003@gmail.com	An Unusual Case Of Inhalational Lung Injury With Chemical Pneumonitis Due To Ammonia With Clinic-Radiological Dissociation In A Young Male.
EP 418	Hetal Balubhai Karmata	hetalkarmata0954@gmail.com	Case Report On Dapsone Induced Methemoglobinemia: A Rare Hematological Complication
EP 419	Dr. Ancy Nisha. N	nishusvs@gmail.com	Mediastinal Teratoma With Endobronchial Extension And Trichoptysis
EP 420	T L N Swamy	drtlnswamy@gmail.com	Plastic Bronchitis In A Liver Transplant Adult Patient
EP 421	Vicky Bakshi	drvickybakshi1986@gmail.com	Chest Radiological Evaluation Of Vocal Cord Paralysis Caused By Thoracic Diseases
EP 422	Dr Asad Ahmad	asadahmad.2030@gmail.com	Rosai Dorfman'S Disease Mimicking Tb: A Case Report
EP 423	Syed Hanan	syedhananqumar@gmail.com	Crack Lung And Pulmonary Complications Of Cocaine Use
EP 424	Gokul Bathe	gokulbathe@gmail.com	Dyspnea In A Case Of Liver Disease
EP 425	Gokul Bathe	gokulbathe@gmail.com	Bone Marrow Transplantation For Covid-Like Primary Immune Deficiency Disorder Associated With Bilateral Bronchiectasis
EP 426	Jerin Paul	jerinpaul15@gmail.com	The Disease Which Sparks From The Blood, Blocks The Vessels And Oozes From The Lung: Hemoptysis And Deep Vein Thrombosis In A Middle Aged Male Due To Apl Syndrome
EP 427	Ganjam Ysaswini	yasasvini.ganjam@gmail.com	Double Aortic Arch: A Rare Presentation In Geriatric Age Group
EP 428	Sagar Gandhi	drsagargandhi06@gmail.com	A Not So Lucrative Job- Confronting A Fungal Ball
EP 429	Shemi P	shemiahammed9@gmail.com	Diagnostic Efficacy Of Cancer Ratio And Cancer Ratio Plus In Malignant Pleural Effusion
EP 430	Dr. Sabahath Nazia	sabahathnaziaa@gmail.com	Cystic Mediastinal Lymphangioma
EP 431	Chitukula Sai Sreekar Reddy	saisreekarreddy1234@gmail.com	Bronchogenic Cyst
EP 432	Dr. Mysa Madhulika	mysamadhulika@gmail.com	Myelomatous Pleural Effusion: A Rare Case Entity
EP 433	Dr.Rushita Nakarani	rushitanakarani@gmail.com	A Curious Case Of Myelomatous Pleural Effusion In Multiple Myeloma
EP 434	Manna Liz George	drmannalizgeorge@gmail.com	A Rare Case Report Of Thymoma Presenting As Hemothorax
EP 435	Niladri Palit	drniladrigk@gmail.com	Pleural Endometriosis
EP 436	Gautam Prem	doctorgautamprem@gmail.com	Pleural Sarcoidosis: A Rare Presentation Of A Systemic Disease
EP 437	Sesha Sai S	gayathrijoshi@gmail.com	Pleural Effusion With A Rare Diagnosis
EP 438	Dr Nikhilesh Pasari	dr.nikhileshpasari@gmail.com	A Rare Case Of Bilateral Pneumothorax Secondary To Cupping Needle Therapy - A Nightmare For Physiotherapist

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 439	Chitukula Sai Sreekar Reddy	saisreekarreddy1234@gmail.com	A Rare Case Of Mediastinal Cyst
EP 440	Syeda Fouzia	nostalgia109@gmail.com	Anterior Mediastinal Mass: A Rare Case Report With Dual Etiology
EP 441	Anubhab Moulik	moulikanubhab@gmail.com	Malignant Pleural Effusion
EP 442	Dhiraj Kumar	dk20510@gmail.com	A Rare Case Of Massive Pleural Effusion
EP 443	Nazmus Saquib	nazmussaquib97@gmail.com	An Unusual Case Of Pleural Effusion
EP 444	Tushant Garg	tushantgarg97@GMAIL.COM	Pyopericardium With Right Empyema Thoracis
EP 445	Sadikul Alam	sadikulalam454@gmail.com	A Patch Of Non-Homogeneity In The Wrong Neighborhood
EP 446	Dr Ketul .A . Patel	ketulpatel129@gmail.com	A Case Of Hepatic Hydrothorax In Decompensated Cirrhosis Due To Alcoholic Liver Disease
EP 447	Ramshanker Reddy	ramshanker.reddy2@gmail.com	A Rare And Atypical Presentation Of Pleural Effusion
EP 448	T Tamizhan	tamilmbbs2013@gmail.com	Role Of Intrapleural Streptokinase For Adhesiolysis In Septated Pleural Effusion
EP 449	Dr Jana Sowmyarani	sowmyarani012@gmail.com	Validation Of Serum Ldh/Pleural Fluid Ada In Patients Presenting With Exudative Pleural Effusion
EP 450	Niranjan Prabhu Ss	drniranjanpharm@gmail.com	Right Haemothorax: Bleed From An Unusual Source
EP 451	Rohita S	mailmer2.4.11@gmail.com	Uncommon Presentation Of Tuberculosis As Chronic Svc Obstruction With Phantom Tumor: A Case Report
EP 452	Kavya M G	kavyagopal69@gmail.com	Myelomatous Pleural Effusion With Rib Lytic Lesion As Initial Presentation Of Multiple Myeloma
EP 453	Soumik Banerjee	soumikb44@gmail.com	T-Cell Lymphoblastic Lymphoma (T-Lbl) Presenting As An Anterior Mediastinal Mass With Bone Marrow And Leptomeningeal Involvement
EP 455	Subhashree Rout	srout013@gmail.com	Spontaneous Esophago-Pleural Fistula Presenting As Right Hydro-Pneumothorax: A Case Report
EP 456	Sara Ahmed	sara2sing_2007@yahoo.co.in	Atypical Presentation Of Anterior Mediastinal Mass Obscured By Pleural Effusion
EP 457	Dr Mahendran Chetty	lydiya.thomas@nhs.scot	Intra Pleural Catheters: Indications And Infection Rates
EP 458	Dr Shilpa K V	drshilpavishnu@gmail.com	All That Granulomas Are Not Tuberculosis: A Case Report Of A Multisystem Granulomatous Disease
EP 459	Gowthaman D	gowthamabddhr@gmail.com	A 30 Years Male With Dysphagia, Dysarthria, Dyspnoea And An Intra-Thoracic Mass
EP 460	Dr Shilpa K V	drshilpavishnu@gmail.com	Isolated Mediastinal Lymphadenopathy In A Rural Indian Mother
EP 461	Md. Wamique Izhar	wamique96izhar@gmail.com	A Case Of Biliopleural Fistula Complicated With Biliobronchial Fistula Following Pericystectomy For Hepatic Hydatidosis
EP 462	Sricharan Yalamanchili	2540223@gmail.com	Pancreaticopleural Fistula: A Rare Complication Of Chronic Pancreatitis
EP 463	Parikshit H.Thakare	pht90175@gmail.com	Mesothelioma
EP 464	Ankita Chakraborty	drankitac97@gmail.com	A Case Report Of Rare Aggressive Mediastinal Tumour In A Middle-Aged Male Showing Granulomatous Pathology Presented With Superior Vena Cava Syndrome: Oral Presentation
EP 465	Golam Ahammad Mondal	dr.golammondal@gmail.com	Solitary Fibrous Tumour Of Lung: A Rare Tumour
EP 466	Naveen Kumar.E	mails2navee@gmail.com	Esophageal Duplication Cyst Presenting As Recurrent Respiratory Tract Infection And Dysphagia
EP 467	Priyanka P Jena	priyankajena10@gmail.com	Bronchogenic Cyst Mimicking Loculated Pleural Effusion

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 468	Priyanka P Jena	priyankapjena10@gmail.com	Rare Case Of Bronchogenic Cyst Presenting As Hoarseness Of Voice
EP 469	Vyshnavi Rajeev	vaishnavirajeev07@gmail.com	Bilateral Chylothorax With Generalized Lymphadenopathy
EP 470	Sunanda Roy	roysunanda29@gmail.com	Renal Cell Carcinoma (Rcc) Presenting As Malignant Pleural Effusion
EP 471	Muhammad Asaduzzaman Biswas	drasaddtcd@gmail.com	An Encysted Large Secondary Spontaneous Pneumothorax Successfully Manages By Simple Needle Aspiration
EP 472	Ankita Panda	ankitanps@gmail.com	Unveiling The Enigma Of Catamenial Hemothorax: Clinical Insights And Management Challenges
EP 473	Priyanka Agrawal	priyankaagrawal227@gmail.com	Extra Intestinal Gastrointestinal Stromal Tumor (Egist) Presenting As Pleural Effusion: A Rare Case Study
EP 474	Syed Afreen	Syedafreen1212@gmail.com	Unanticipated Advent Of Pleural Mass: A Pleural Schwannoma
EP 475	Kanimozhi. S V	KANIMOZHISV2678@GMAIL.COM	An Interesting Case Of Pleural Schwannoma
EP 476	Sujitha .T	sujithathangaraj10@gmail.com	Pneumocystis Jirovecii Pleural Effusion
EP 477	K V Kranthi Krishna	kranthi.krishna139@gmail.com	Myelomatous Pleural Effusion
EP 478	Narasimha Sareddy	narasimhasareddy5602@gmail.com	T Lymphoblastic Lymphoma Presenting As Massive Effusion
EP 479	Aryasree V M	vmaryasree777@gmail.com	Solitary Fibrous Tumor Of Pleura
EP 480	Shruthi	shruthianeredy@gmail.com	Pulmonary Mucormycosis Presenting As Empyema
EP 481	Tirupati Hema	doc.hema.t@gmail.com	A Unique Presentation Of Pleural Effusion Leading To Metastatic Adenocarcinoma
EP 482	Dr Bhaskara Rao Ravella	ravellabhaskar999@gmail.com	A Rare Case Report Of Empyema Necessitans
EP 483	Merugu Neeraja	neerajamerugu161@gmail.com	An Analytical Study Of Role Of Intrapleural Streptokinase For Pleural Adhesiolysis In Sonographically Loculated Pleural Effusions
EP 484	Karthikeyan S P	karthipkg@gmail.com	A Case Of Extrapulmonary Hydatid Cyst Presenting As Left Loculated Pleural Effusion And Masquerading As Left Upper Lobe Mass
EP 485	Muniraju	muniberikutti.dr@gmail.com	Atypical Presentation Of Rabies
EP 486	Utkarsh Suyal	utkarsh.suyal.1993@gmail.com	Puzzling Perspectives: Complex Case Of Pleural Sarcoidosis In A Young Male
EP 487	K. Manasa Bai	manu.manasa86@gmail.com	Chylothorax With Double Lesions Below Diaphragm
EP 488	Dr. Sidhaant Nangia	sidhaant_nangia@yahoo.co.in	Management Of Hemothorax- A Novel Approach
EP 489	B.Mehataj	mehataj22@gmail.com	A Study On Efficacy And Safety Of Iodopovidone Pleurodesis In Recurrent Pneumothorax And Malignant Pleural Effusion
EP 490	A . Vasudevan	avasudevan6@gmail.com	Aortic Aneurysm Masquerading As Mediastinal Mass-Ortner Syndrome
EP 491	Dr Reshma K R	tallex4925@gmail.com	Clinico-Radiological And Etiological Profile Of Pleural Effusion At A Tertiary Care Centre In Kerala
EP 492	Sakthi Bhalan Pandiarajan	dr.sakthibhalan.p@gmail.com	The Reliability Of Pleural Cholesterol And Pleural Ldh In Determining The Exudative Or Transudative Nature Of Pleural Effusions
EP 493	Dr Devika Shukla	devikashukla2@gmail.com	Rare Case Report Of Solitary Fibrous Tumour Of Pleura Presenting As Pleural Mass
EP 494	Dr Anjali V B	vbanjali023@gmail.com	A Rare Case Of Primary Mediastinal Seminoma With Superior Vena Cava Syndrome
EP 495	Spandana Chaudhury	spandanachaudhury31@gmail.com	A Rare Case Of Boerhaave Syndrome Managed Conservatively
EP 496	Dev Rishi	spvdrathe@gmail.com	A Rare Case Of Diffuse Large B Cell Lymphoma Presenting As Mediastinal Mass
EP 497	Vuduthala Likhitha	likhitha.patel99@gmail.com	Role Of Pleural Fluid Neutrophil To Lymphocyte Ratio In The Evaluation Of Pleural Effusion

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 498	Dev Rishi	spvdrathe@gmail.com	A Rare Case Of Lung Gangrene With Empyema Thoracis In Acute On Chronic Pancreatitis In A 15- Years-Old Boy
EP 499	Moganti Veera Lakshmi Aparna	aparnamoganti046@gmail.com	A Study On Efficacy Of Pleural Fluid Alp And Its Ratio To Serum Alp In Distinguishing Between Tuberculous And Non Tuberculous Pleural Effusions
EP 500	Manda Shailushi Kiranmai	sailushimandakiranmai@gmail.com	Role Of Pleural Adenosine Deaminase (Ada)- Pleural Fluid C-Reactive Protein (Crp) Levels, And Their Combination In Dignosis Of Exudative Pleual Effusions
EP 501	Saket Sharma	sschest@gmail.com	Bronchogenic Cyst With Amylase Rich Effusion
EP 502	Aayush Vishwakarma	dr.aayushvishwakarma@gmail.com	To Study Pleural Complications In A Rare Occurrence Of Intrapleural Extraparenchymal Hydatid Cyst
EP 503	V Meghnasreedevi	meghnasreedevi@gmail.com	Boerhaave Syndrome
EP 504	Mohan Srinivas Kunapareddy	mohanchintu4@gmail.com	A Rare Case Of Tracheo Bronchial Fistula- Boerhaave Syndrome
EP 505	Kaviya. B	kaviyakavu28@gmail.com	Hemoptysis: A Rare Presentation Of Aortic Pseudoaneurysm
EP 506	Kediri Mounika	mounikakrishnakediri26@gmail.com	Serum Creatinine As A Potential Biomarker For The Diagnosis Of Tuberculous Pleural Effusion
EP 507	Akanksha Chaudhary	akankshachaudhary123@gmail.com	A Rare Case Of Myeloid Sarcoma With Atypical Presentation Of Massive Pleural Effusion And Its Diagnostic Challenges
EP 508	Apoorva Lakshmi Sathi	apoorvasathi7799@gmail.com	A Comparative Study Of Serum Effusion Albumin Gradient To Light'S Criteria In Differentiating Transudative From Exudative Pleural Effusion
EP 509	Yenugupalli Vijayapriya	vijayapriyayenugupalli@gmail.com	Recurrent Primary Spontaneous Pneumothorax
EP 510	Niharika Naik	rubynaik516@gmail.com	Evaluation Effect Of Thoracocentesis On Spirometry, Abg Values And 6 Min Walk Test In Symptomatic Patients With Moderate And Massive Pleural Effusions
EP 511	Priyanka P Jena	priyankapjena10@gmail.com	Rare Case Of Bronchogenic Cyst Presenting As Hoarseness Of Voice Edited
EP 512	Garima	geetpasricha@gmail.com	A Patient With Treated Hydropneumothorax Presenting With Unexplained Disproportionate Dysnea
EP 513	V. Darshini	v_darshini@yahoo.in	A Case Of Endobronchial Ewings Sarcoma
EP 514	Dr Santosh Kumar Bairwa	DRSKBAIRWA82@GMAIL.COM	Pleuro-Pericardial Effusion Life Threatening Complication Of Amoebic Liver Abscess
EP 515	Unnikrishnan R	unnikrishnankrish003@gmail.com	Vanishing Lung Syndrome Resembling Pneumothorax
EP 516	Megha Varghese	megha.susanvarghese@gmail.com	Middle Mediastinal Thymoma: An Uncommon Case In A Rare Location
EP 517	Md Arshad Ejazi	drarshad2k5@gmail.com	Different Thoracoscopic Appearances Of Pleural Tuberculosis And Its Association With Histopathological And Microbiological Diagnosis
EP 518	Yogesh Mishra	yogeshmishra98@gmail.com	Tracing The Wrong Avenue: Spontaneous Esophagopleural Fistula Causing Unresolving Cough
EP 519	Geethapriya S	geethapriya110@gmail.com	Posterior Mediastinal Mass- Schwannoma
EP 520	Dr Pramod Chavan	drpramodchavan29@gmail.com	Undiagnosed Recurrent Pleural Effusion: Is Thoracoscopy A Reliable Investigation? A Case Report
EP 521	Arularasu.P	dr.arularasupaari@gmail.com	Unveiling A Rare Interface: Chylothorax In Association With Klippel-Trenaunay Syndrome
EP 522	Gaddam Saranya	saranyagaddam18@gmail.com	Therapeutic Potential Of Medical Thoracoscopy In Cases Of Chronic Pneumothorax
EP 523	Adipudi Subrahmanya Sairam	sairam.dbgt@gmail.com	An Unusual Case Of Spontaneous Esophago-Pleural Fistula Presented As Pyo-Pneumothorax With Double Esophageal Perforation

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 524	Dr G.S.K Ravikanth	ravikanth.g.s.k@gmail.com	A Study Comparing Pleural Fluid Ada And Lymphocyte-Neutrophil Ratio And Pleural Fluid Ada Alone In Diagnosis Of Tb Pleural Effusion
EP 525	Billa Sindhuja	dr.sindhujabilla@gmail.com	An Unusual Case Of Pseudo Meigs Syndrome
EP 526	Riya Maheshwari	riyamaheshwari00@gmail.com	A Young Male Presenting With Shortness Of Breath: An Unusual Presentation Of Carcinoma Of Pancreatico-Biliary Origin
EP 527	Bidisha Devi	bidishadevi.2010@gmail.com	Role Of Ultrasonography In Diagnosis And Management Of Acute Respiratory Failure: An Observational Study From A Tertiary Care Centre
EP 528	Swati Patnaik	swatipatnaik14@gmail.com	Etiology, Risk Factors And Outcomes Of Central Line-Associated Blood Stream Infections In Respiratory Icu Of A Tertiary Care Hospital
EP 529	Christie George Joseph	christiegeojoseph@gmail.com	Cannot Breathe: A Perplexing Case Of Concomitant Cidp And Myasthenia Gravis Causing Recurrent Respiratory Failure
EP 530	Aswathy G	g.ashwathy@gmail.com	Case Of Multiple Aortic Aneurysm With Hlh Causing Pulmonary Haemorrhage And Respiratory Failure
EP 531	Aiswarya	aiswaryaabi20@gmail.com	A Case Report Of Anabolic Steroid Induced Diffuse Alveolar Haemorrhage
EP 532	Priyanka Agrawal	priyankaagrawal227@gmail.com	To Use Qsofa (Quick Sequential Organ Failure Assessment) Score As A Predictor Of Mortality In Respiratory Infections And Comparing The Effectiveness Of Score Among The Taken Infections
EP 533	Dr Imadabathuni Navya Sree	doctornavyasree@gmail.com	A Comparitive Study Of Risk Stratification Scores Smart-Cop And Scap In Determining Icu Admissions In Community Acquired Pneumonia
EP 534	L.Pavan Prasanth	dr.pavanprasanth@gmail.com	Hacor Score As Indicator For Failure Of Non-Invasive Ventilation And Need For Early Intubation
EP 535	Y Sri Harshitha	yerramsettisriharshitha@gmail.com	A Rare Case Report Of Severe Ohss Presenting As Ards
EP 536	Dr Asha Undrajavarapu	ashaangelica@gmail.com	A Hospital Based Longitudinal Study On Outcomes And Its Associated Factors Among Respiratory Intensive Care Unit In A Tertiary Care Center In Central India
EP 537	A.Charitha Reddy	cherry3579@gmail.com	A Cavity Which Is Different
EP 538	Ankita Panda	ankitanps@gmail.com	Is Every Lung Mass Cancer?
EP 539	Dr Meghena Mathew	meghna.vasanth@gmail.com	Pet Positive Lesion: A Pleasant Surprise! Its Pulmonary Actinomycosis
EP 540	Dr. Chandra Mouli Suryadevara	chandusuryadevara08@gmail.com	Pulmonary Mucormycosis In Uncontrolled Diabetes
EP 541	Bhargav Maniya	bhargav.maniya98@gmail.com	A Case Report Of Plumonary Nocardiosis
EP 542	Thannushree Aritakulu Badrinath	thannu23@gmail.com	Are Humans Losing The Race Against The Superbugs ?? A Rare Case Series !!
EP 543	Christie George Joseph	christiegeojoseph@gmail.com	Fungal Pneumonia Concealing Bacterial Pneumonia: A Diagnostic Dilemma
EP 544	Nerusu Dinesh	dineshnerusu@gmail.com	A Rare Case Of Rothia Mucilaginosa Pneumonia
EP 545	Tushant Garg	tushantgarg97@gmail.com	Misdiagnosis Of Tuberculosis In A Case Of Hemoptysis
EP 546	Hassan Mushtaq	hassan.m.choudhary1@gmail.com	A Case Of Adenovirus Pneumonia In An Adult And Immunocompetent Male, During A Recent Epidemic Of Pediatric Adeno Infection In West Bengal
EP 547	Namrata Kulkarni	Namrata.kulkarni@pfizer.com	A Prospective, Cross-Sectional, Questionnaire-Based Survey To Understand The Drivers And Barriers To Pneumococcal Vaccination In Adults In India
EP 548	M Srikanth Goud	goudsri76@gmail.com	Uncommon Cause Of Pneumonia
EP 549	Malavika Reddy Kandala	doc.malavikareddy14@gmail.com	Co Infection Of Lophomonas Blattarum And Hydatid Lung Disease: A Rare Case Report

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 550	Sruthy Vijayan	sruthy1095@gmail.com	Ocular Syphilis Manifestation In Pulmonary Sarcoidosis: Concomitant Or Co-Existent?
EP 551	Saugata Mandal	saugatamandal20@gmail.com	An Unusual Case Of Bilateral Lung Cavities
EP 552	Dr.N.Joshua Selvarajan	joshchella@gmail.com	Evaluation And Correlation Of Disease Severity With Clinico Radiological And Pulmonary Function Parameters In Post Covid 19 Patients
EP 553	Alisha K	surumialisha@gmail.com	Pulmonary Hydatid Cyst
EP 554	Navaneethan M	naveensmile996@gmail.com	Correlation Of Clinico-Laboratory Profile And Hrct Thorax Severity Scoring At Admission With Treatment Outcomes Among Moderate And Severe Covid-19 Cases: A Record Based Cross-Sectional Study
EP 555	Chandini Haridas	chandini_haridas8918@yahoo.com	A Rare Case Of Nocardia Arthritis Infection In An Immunocompetent Patient
EP 556	George Paul	georgep725@gmail.com	A Wild-Goose Chase Around The Cavity?
EP 557	Manasa Kuthadi	cool.manasa.96@gmail.com	A Case Of Disseminated Nocardiosis And Concurrence Of Pulmonary Embolism In An Immunocompetant Women
EP 558	Dr. Vishwa Thakkar	vishwathakkar7@gmail.com	A Rare Benign Cause Of Life Threatening Airway Obstruction
EP 559	T.K.Sree Sandhya	vijisree17@gmail.com	Post Covid Aspergilloma
EP 560	Ala P	alanishadsep30@gmail.com	A Rare Case Of Aseptic Abscess Syndrome
EP 561	Nidhi Amitkumar Patel	drnidhipatel1998@gmail.com	Pleural Effusion: Beyond Our Thinking
EP 562	Shashidhar S Vananjakar	dr.ssvananjakar@yahoo.com	Clinical Co-Relation Of Candida Species Isolation In Bal Fluid: Observational Study At A Tertiary Care Centre
EP 563	S.Rishabh	rishirishabh101@gmail.com	A Rare Case Of Pulmonary Mucormycosis Presenting With Vocal Cord Palsy: A Lethal Companion
EP 564	Sreepriya P.R	sreepriya2k11@gmail.com	Prospective Case-Control Study On Analysis Of Risk Factors Of Mucormycosis In Covid 19 Patients
EP 565	S.M. Ahmed	fromahm9@gmail.com	Microbiological Profile Of Community-Acquired Pneumonia In An Intensive Care Unit Of A Tertiary Care Hospital In Visakhapatnam, India
EP 566	Anay Kodape	anaykodape7@gmail.com	Clinical Profile And Outcomes Of Patients Presenting With H1N1 Pneumonia And Respiratory Failure At A Tertiary Care Centre In Central India
EP 567	Kairi Anil	dranilkairi@gmail.com	Assessment Of Symptoms, Spirometry In Moderate To Severe Covid 19 Patients At 3 Months After Hospital Discharge
EP 568	Sahaya Vinoth M	sahayavinothm@gmail.com	A Rare Case Of Pulmonary Artery Pseudoaneurysm Secondary To Mucormycosis
EP 569	Anna Jacob	annaannu@gmail.com	Rare Presentation Of Aspergillus Infection
EP 570	Sharon Anna Sam	sharonannasam@gmail.com	Aspergillus Lung Abscess: An Uncommon Bewilderer In Immunocompetent Host
EP 571	Abinash Dandasena	abinashdandasena79@gmail.com	Aggressive Pneumonia Due To Klebsiella Aerogenes Among Enterobacteriaceae
EP 572	Neema K Saji	neemasaji@gmail.com	Pulmonary Hydatid Cyst: A Rare Cause Of Dyspnea And Hemoptysis
EP 573	Srishti Tripathi	srishti17mona@gmail.com	A Case Of Invasive Aspergillus Tracheobronchitis Managed With Intra-Lesional Injection Of Amphotericin B
EP 574	Rahul John Kundukulam	rahuljohn8.rj@gmail.com	Clinical And Bacteriological Profile Of Patients With Lower Respiratory Tract Infections: A Cross-Sectional Study
EP 575	Dr Rajesh Gupta	drrgupta63@gmail.com	Analysis Of Spectrum Of Bacterial And Fungal Growth In Patients With Bronchiectasis
EP 577	Chinthnuru Shivani	chintanurushivani@gmail.com	A Rare Case Of Community Acquired Pneumonia Caused By Citrobacter Koseri In An Immunocompetent Patient

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 578	Meenagowri G	october6meenagowri@gmail.com	A Rare Case Of Recurrent Tracheal Rhinosporidiosis
EP 579	Aaradhya Ramasahayam	aaradhya.aaradhya872@gmail.com	A Rare Case Report Of Disseminated Cryptococcosis In Immunocompetent Host
EP 580	Vitta Srujana	srujana.nov3@gmail.com	Pulmonary Mucormycosis Masquerading As Endobronchial Tumour
EP 581	Gautam Sharma	gautam21196@gmail.com	Incidental Pulmonary Findings In Cect Abdomen
EP 582	Anjana G	aasmi1am@gmail.com	Kartagener Syndrome: Importance Of Unveiling Diagnosis Early In Life For Improving The Quality Of Life
EP 583	Kunal Dhar	dhardrkunal@gmail.com	Pulmonary And Cutaneous Zygomycosis
EP 584	Dr.Suraj Rishika	rishikasuraj@gmail.com	A Rare Case Report Of Churg-Strauss Syndrome And Loeffler' S Syndrome In The Same Patient
EP 585	Dr. Gajanan V. Panchal	gajananvpanchal@lupin.com	A Questionnaire Based Survey To Ascertain The Views Of Ent Specialists Regarding Use Of Antibiotics For The Treatment Of Urtis
EP 586	Venkatesh Nama	doc.venkatesh3@gmail.com	The Pao2/Fio2 Ratio And Total Leukocyte Count Are Two Important Parameters Used In Predicting Outcomes In Community-Acquired Pneumonia (Cap) With Respiratory Failure
EP 587	Dr.Smrithi.S.Prabha	smrithi.ssp@gmail.com	Case Report Of Cavitating Necrotising Pneumonia Caused By Mrs
EP 588	Mithun Nilgiri K	mithunnilgirik@gmail.com	Clinico, Epidemiological And Laboratory Factors Influencing Covid 19 Severity
EP 589	Moram Vaishnavi	vaishnavimoram@gmail.com	Candida Pneumonia: An Innocent Bystander Or A Silent Killer
EP 590	Dr. Ibrahim S M H	ibrahimsmh2014@gmail.com	An Interesting Case Of Invasive Aspergillosis In Young
EP 591	Tarakaturi Sharon Swarna Sheela	sssharonts42@gmail.com	Subacute Invasive Aspergillosis: A Challenging Diagnosis
EP 592	Gautam Sharma	gautam21196@gmail.com	Incidental Pulmonary Findings In Cect Abdomen
EP 593	Apoorva Lakshmi. Sathi	apoorvasathi7799@gmail.com	A Rare Case Pulmonary Hydatid Cyst With Massive Unilateral Pleural Effusion Presenting
EP 594	Niranjana. A	niranj7.gishan@gmail.com	Pulmonary Nocardiosis Presenting As Lung Mass
EP 595	Chandrani Chatterjee	pulmonologistdr.chandrani@gmail.com	Pulmonary And Hepatic Echinococcosis
EP 596	Dr Gajanan Gaude	gsgaude922@gmail.com	Serum Biomarkers Do Not Predict The Survival And Length Of Hospitalization In Patients Admitted With Covid 19 Infection
EP 597	Sajin Vijayan	vijayansajin@gmail.com	A Subtle Case Of Hemoptysis - Lung Sequestration
EP 598	Narasimha Sareddy	narasimhasareddy5602@gmail.com	Clinical Score To Predict Isolation Of Pseudomonas Infection In Pneumonia
EP 599	Kaviya. B	kaviyakavu28@gmail.com	Pseudomembranous Aspergillus Tracheobronchitis: A Rare Manifestation Of Invasive Pulmonary Aspergillosis
EP 600	Dr. Sri Devi Ganesan	sridevi1995gms@gmail.com	Post Operative Pulmonary Complications Following Surgeries
EP 601	Dr.Imadabathuni Navya Sree	doctornavyasree@gmail.com	A Comparative Study Of Risk Stratification Scores Smart-Cop And Scap In Determining Icu Admissions In Community Acquired Pneumonia
EP 602	C.Sai Charan Gupta	csunny.cbunny@gmail.com	Pulmonary Mucormycosis Masquerading As Non-Resolving Pneumonia
EP 603	Srishti Tripathi	srishti17mona@gmail.com	Aspergillus Overlap Syndrome
EP 604	Anuj Ajayababu	anuj.ajayababu@gmail.com	Effect Of Varying Instillate Volumes On Diagnostic Utility Of Bronchoalveolar Lavage Galactomannan In Suspected Chronic Pulmonary Aspergillosis
EP 605	Mohammed Riaz	mohammedriaz79@gmail.com	A Rare Case Of Lung Abscess Coexisting With Bronchopleural Subcutaneous Fistula

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 606	Dhires Chourasiya	dhircou@gmail.com	Neutrophil To Lymphocyte Ratio In Community Acquired Pneumonia And Its Correlation With Other Inflammatory Markers
EP 607	Roopesh Kishan K	k.roopeshkishan007@gmail.com	A Case Report On A Case Of Lipoid Pneumonia
EP 608	Utkarsh Suyal	utkarsh.suyal.1993@gmail.com	Respiratory Syncytial Virus Infection In Adults With Underlying Lung Disease: A Series Of Cases
EP 609	Prakash S	sprakash1989@gmail.com	An Innocent Bystander Or A Hazardous Peril
EP 610	Balram Chouhan	balramchouhan6.bc@gmail.com	Pulmonary Mucormycosis In Old Treated Pulmonary Tuberculosis In Diabetic Patients
EP 611	Athira K K	athirakk52@gmail.com	Post Viral Mayositis: A Case Report
EP 612	Chaithanya Malalur	chaithanya.malalur@pfizer.com	Clinical And Economic Burden Of Community Acquired Pneumonia (Cap) Among Adults In India
EP 613	Arularasu	dr.arularasupaari@gmail.com	Unmasking The Silent Invader: Pneumocystis Jiroveci Pneumonia In A Myasthenia Gravis
EP 614	Zaid Khan	niazizaidkhan@gmail.com	Effect Of Mycobacterium W (Heat Killed) As Immunomodulator, Add On Therapy In Outcome Of Moderate To Severe Covid 19 Patients
EP 615	Zaid Khan	niazizaidkhan@gmail.com	Vaccine Hesitancy And Coronavirus Disease - 19 : Where Do We Stand?
EP 616	Saladi Suma	sumasaladi15@gmail.com	Non Resolving Pneumonia, Causes And Evaluation: Our Experience
EP 617	Akhila	akhilarathode84@gmail.com	Rare Form Of Aspergillosis Mimicking Hydatid Cyst
EP 618	Koppula Sumasri	drsumareddy1996@gmail.com	A Case Report Of Hydropneumothorax Due To Non-Tuberculosis Mycobacteria In An Immunocompetent Patient
EP 619	Saumya Gupta	saumyagupta2996@gmail.com	Invasive Aspergillosis In Immunocompetent Individual: A Case Report
EP 620	Dr Vatsal Bhushan Gupta	vatsalgupta.gkp@gmail.com	A Cross Sectional Study To Describe The Spectrum Of Chronic Pulmonary Aspergillosis In Post Tuberculosis Patients At A Tertiary Care Institute
EP 621	Dr Manikiranreddy	reddymanikiran11@gmail.com	Inflammatory Myofibroblastic Tumour Of The Lung Presented As Tracheal Mass
EP 622	Ashish K Arsule	ashisharsule1995@gmail.com	A Case Of Disseminated Hydatid Cyst In An 11-Year-Old Female
EP 623	Dr Sarang Patil	sarangspatil1@gmail.com	Osa In Obese Post Tuberculosis Patients
EP 624	Sravana Kutikuppala	sranakutikuppala@gmail.com	Insulinoma In Obstructive Sleep Apnea Patient
EP 625	Saurabh Jain	drsaurabhgundecha@gmail.com	Prevalence Of Obstructive Sleep Apnea (Osa) In Chronic Obstructive Pulmonary Disease (COPD)
EP 626	Arun	saarunanand@gmail.com	A Cross Sectional Study On Perception Of Sleep Quality And Incidence Of Obstructive Sleep Apnea Among Diabetic And Non-Diabetic Patients With Obstructive Airway Disease
EP 627	Beauty Prasad R	beautyprasadr@gmail.com	A Study To Correlate Sleep Stage Independent Obstructive Sleep Apnea With Polysomnographic Variables And Sleep Questionnaires
EP 628	Subham Sahoo	subhamsahoo2026@gmail.com	Decoding The Midnight Mystery: Sleep Related Hypermotor Epilepsy (She) With Obstructive Sleep Apnea Syndrome (Osa)
EP 629	Chirutha Maneesha	maneesha.manu09@gmail.com	Non Invasive Ventilation In Hypercapnic Respiratory Failure
EP 630	Deekshitha	drdeekshitha03@gmail.com	Anti Iglon5 Antibody Disease- Why A Concern For Pulmonologist?
EP 631	Sukanya Dileep	sukanyasdk@gmail.com	Proportion Of Type 2 Diabetes Among Patients With Obstructive Sleep Apnoea And Correlation Of Diabetes Control With Severity Of Obstructive Sleep Apnoea In A Tertiary Health Care Center
EP 632	Dr.Sankari Prabha.A.P	sankariprabha97@gmail.com	Anti Iglon5 Disease: A Rare Cause Of Respiratory Failure

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 633	Krishnaveni Renganathan	krishi1490@gmail.com	Agreement Between Patient And Partner Reported Ess Scores In Patients With Obstructive Sleep Apnea
EP 634	J Neha Sree	neharaodr@gmail.com	Prevalence Of Obstructive Sleep Apnea In Metabolic Syndrome
EP 635	G.Kalpana	kalpana.gundapu@gmail.com	Central Serous Retinopathy Secondary To Tuberculosis
EP 636	Dr Divya Chunchu	Divyachunchu95@gmail.Com	A Cross Sectional Study Of Pulmonary Function Test, Exercise Capacity & Health Related Quality Of Life In Cured Pulmonary Tuberculosis Patients At A Territory Care Center In Telangana
EP 637	Najma.N	najmanalakath79@gmail.com	Comparative Study Of Clinico-Radiological Profile And Treatment Outcome Of Pulmonary Tuberculosis In Smokers And Nonsmokers At A Tertiary Care Centre In Telangana
EP 638	Vitta Srujana	srujana.nov3@gmail.com	Clinico-Radiological Profile Of Lower Lung Field Tuberculosis Cases Among Young Adults And Elderly People In A Tertiary Care Center
EP 639	Kanchanapally Pranathi Chandra	pranathichandra208@gmail.com	Clinico-Radiological Correlation Of Serum Albumin In Confirmed Tuberculosis Patients Taking Anti Tuberculosis Treatment
EP 640	Rafeeka Keyzare	keyzare@gmail.com	Haematological Toxicity Of Linezolid In Multidrug Resistant Tuberculosis
EP 641	Maheswari R	mahirajangam@gmail.com	A Cross Sectional Study On Nutritional Profile Of Patients With Tuberculosis At A Tertiary Care Centre
EP 642	Pratima Dhurka	pratimadhurka2013@gmail.com	A Comparative Study On Rate Of Sputum Conversion And Treatment Outcome Among Tuberculosis Patients With And Without Diabetes Mellitus Taking Antituberculosis Treatment
EP 643	A . Vasudevan	avasudevan6@gmail.com	Rapid Diagnosis Of Tubercular Lymphadenopathy By Cartidge Based Nucleic Acid Amplification (Cbnaat) And It'S Correlation With Ziehl Neelson Staining On Fine Needle Aspiration Technology
EP 644	Rama Bera	mbbsrama1995@gmail.com	Anti Tubercular Drugs Induced Dress Syndrome
EP 645	Neelesh Guttikonda	neelesh.guttikonda@gmail.com	A Silent Menace Unveiled: A Unique Presentation Of Genitourinary Tuberculosis In An Elderly Patient With Smear-Negative Pulmonary Tuberculosis
EP 646	Samrita Mukhopadhyay	mukherjeesamrita@rediffmail.com	Pulmonary Tuberculosis Presenting As Right Upper Lobe Mass With Bilateral Pleural Effusion Disguised As Bronchogenic Carcinoma
EP 647	Challa Siva	challa.siva.0009@gmail.com	Anterior Mediastinal Mass: A Rare Presentation Of Tuberculosis
EP 648	Mansukh Hadiya	h.mansukh12@gmail.com	Pulmonary Arteriovenous Malformation In A Patient With Tuberculosis Sequels: A Rare Cause Of Hemoptysis
EP 649	Balasubramanian	balasm1610@gmail.com	Co-Existence Of Active Pulmonary Tuberculosis And Chronic Pulmonary Aspergillosis In A Diabetic Patient
EP 650	Pateel Sumanth Kumar Reddy	sumanthreddypateel@gmail.com	Tb Presenting As Malignancy
EP 651	Dr.Rushita Nakarani	rushitanakrani@gmail.com	Rare Tumorous Variant Of Endobronchial Tuberculosis: Diagnostic Challenges
EP 652	Sagarika Khatua	sagarikakhatua95@gmail.com	A Rare Case Of Primary Disseminated Rifampicin Resistant Tuberculosis & Pyoperitoneum
EP 653	Muhlisa M L	muhlisamr@gmail.com	A Rare Case Of Multiple Cold Abscess
EP 654	Chirag Jain	chiragjain6910@gmail.com	Left Sided Complicated Tubercular Pyopneumothorax With Persistent Air Leak
EP 655	Pavan N Kumar	pkreddy24297@gmail.com	Miliary Tb And Atypical Presentation
EP 656	Debaranjan Das	drdebaranjan.das@gmail.com	Pulmonary Tuberculosis And Iron Deficiency Anemia, In A Tertiary Care Hospital, Odisha

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 657	Chirag Jain	chiragjain6910@gmail.com	Outcome Of Delamanid (Dlm) Containing Regimen For Multi-Drug Resistant Tuberculosis In Pediatric Age Group At Nodal Drtb Centre
EP 658	Dr Kaumudi Devi	kaumudidevi12@gmail.com	Opposites Attract: A Rare Case Of Anaerobic Actinomyces Superinfection In A Patient With Pulmonary Tuberculosis
EP 659	Shankhadeep Sarkar	shankha.cmc@gmail.com	A Rare Presentation Of Extra Pulmonary Tuberculosis: Tuberculous Vitritis
EP 660	Moutrisha Ghorai	moutrisha.18@gmail.com	Endobronchial Tuberculosis
EP 661	Baijayantimala Mishra	micro_baijayantimala@aiimsbhubaneswar.edu.in	Clinical Presentation Of Nontuberculous Mycobacteria (Ntm) As Suspected Pulmonary Tuberculosis: A Case Series
EP 662	Chayanika Mandal	chayanikakonna@gmail.com	A Rare Presentation Of Extra Pulmonary Tuberculosis With Concomitant Pulmonary Disease
EP 663	Arun Raja V	arunraja4u@gmail.com	Pleural Biopsy Cbnat (Xpert Mtb/Rif) In The Diagnosis Of Tb Pleural Effusion
EP 664	Adarsh J S	adarshsuper1@gmail.com	A Rare Case Of Post Tubercular Bronchial Stenosis
EP 665	Jia Ur Rahman	drjiaur2@gmail.com	Utility Of Pleural Fluid Ada/Serum Crp Ratio In Differentiating Tubercular Pleural Effusion (Tpe) And Parapneumonic Pleural Effusion (Ppe)
EP 666	Amiya Dutta Giri	duttaamiya90@gmail.com	Abdominal Tuberculosis With Unilateral Massive Transudative Pleural Effusion: A Case Report
EP 667	Arpit Pandey	ARPITP053@GMAIL.COM	Unique Case Of An Old Surgical Scar With Pulmonary Tuberculosis
EP 668	Gangangari Rakesh Reddy	rakeshreddy.gangangari@gmail.com	Leprosy And Pulmonary Tuberculosis Co-Infection: An Uncommon Entity
EP 669	Dr Surjya Shankar Meher	suraj.munnabhai@gmail.com	Study On Serum Procalcitonin And Serum C- Reactive Protein In Pulmonary Tuberculosis Patients , And Its Association In A Tertiary Care Hospital In Odisha
EP 670	Vickey Panjiyar	vickypanjiyar@gmail.com	Can Miliary Tb Present As Latent Infection? Rare Presentation!
EP 671	Souvik Ghosal	ghosalsouvik4@gmail.com	A Case Of Unilateral Parotid Gland Swelling: A Diagnostic Dilemma
EP 672	S.Srinath	ssrinath016@gmail.com	Strongyloides Hyperinfection Syndrome With Pulmonary Tuberculosis Masquerading As Acute Exacerbation Of Copd
EP 673	S Dileepan	dileepanishgraham@gmail.com	A Case Of Triple Trouble - Hiv, Tb, And Hansen'S Disease
EP 674	Nikhil Patil	nppatil04@gmail.com	Poncet'S Disease: Unusual Presentation Of Tuberculous Rheumatism
EP 675	Smrithi S Prabha	smrithi.ssp@gmail.com	Att Induced Dress Syndrome
EP 676	Smrithi	smrithi.ssp@gmail.com	Endobronchial Tb - A Mimicker Of Asthma
EP 677	M.Prashanthi	prashanthi.mannelly@gmail.com	Clinical Significance Of Erythrocyte Sedimentation Rate In Tuberculosis
EP 678	Dr Maheswari.P	drmaheswari257@gmail.com	A Study To Determine The Role Of 10Xada/Ldh Ratio In Differentiating Tuberculous Effusion From Parapneumonic Effusion
EP 679	Amith A	amithmbs01@gmail.com	Clinical And Pulmonary Function Evaluation In Post-Pulmonary Tuberculosis Patients
EP 680	Dr.V.P.Karthik Kumar	karthik2921996@gmail.com	Ptb In Cpfe Patient
EP 681	Siva.S	s.siva465@gmail.com	Isoniazid Induced Dress Syndrome
EP 682	Siva.S	s.siva465@gmail.com	Miliary Tuberculosis Presenting With Rare Complications
EP 683	Krishnapriya S	001krishnaatjnv@gmail.com	A Case Of False Positive Cbnaat In Adenocarcinoma Patient
EP 684	Chinthakindi Shravan Kumar	shravyachin@gmail.com	Case Series Of Pericardial Tamponade Caused By Tuberculous Pericarditis
EP 685	Chinthakindi Shravan Kumar	shravyachin@gmail.com	Cns Tuberculosis In Immunocompetent Adults: A Case Series

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 686	Kavitha.K.Nair	nairkavitha93@gmail.com	Pulmonary Tuberculosis Mimicking As Lung Tumour
EP 687	Nagularavind Jc	naguldhoni@gmail.com	A Prospective Case Series Study Of Active Pulmonary Tuberculosis With Pulmonary Thromboembolism In Government Rajaji Hospital, Madurai, Tamilnadu
EP 688	S.Kishore	kishoresaravanan777@gmail.com	A Rare Presentation Of Extrapulmonary Tuberculosis Following Sports Injury
EP 689	Dr. Khusboo Bihani	bihanikhusboo095@gmail.com	Three Cases Of Upper Extremity Deep Vein Thrombosis In Tuberculosis: A Rare Case Study
EP 690	Sakthivel.M	SHAKTHIMBBS4@GMAIL.COM	A Case Of Tuberculosis Luposa
EP 691	Surya Prakash B	suryaprakashb1997@gmail.com	Appearances Are Deceptive- We Are The Perfect Example
EP 692	Yaragangu Rambabu	yrambabunaidu@gmail.com	Rifampicin Resistant Extra Pulmonary Lymph Node Tb
EP 693	Anna Jacob	annaannu@gmail.com	An Unusual Cause For Cervical Lymphadenopathy
EP 694	Halma Salam V.A	halmasalam17@gmail.com	Exploring Post-Tuberculosis Sequelae: A Comprehensive Clinico-Radiological Study In A Central Indian Tertiary Care Hospital
EP 695	Neema K Saji	neemasaji@gmail.com	A Cross-Sectional Study To Assess The Stigma Associated With Tuberculosis Among Tb Patients In Khammam, Telangana
EP 696	Dr. N. A. Priya Darshini	priya.boopathy1996@gmail.com	Co-Existence Of Tuberculosis And Sarcoidosis: A Case Report
EP 697	Sushree Swetapadma	sush.isha9@gmail.com	Drtb Cases In Series
EP 698	Rama Mourya	mourya.rama111@gmail.com	To Study The Sputum Conversion Percentage At The End Of Intensive Phase Of Category-1 Regimen In The Treatment Of Pulmonary Tuberculosis Patients With Diabetes Mellitus Or Hiv Infection And Risk Factors Analysis
EP 699	Saravanan S P	spsaravanan1992@gmail.com	An Unusual And Interesting Case Of Cutaneous Bcgosis Following Bcg Administration
EP 700	Pragati Rautela	pragatirautela15@gmail.com	To Compare The Tb Treatment Outcomes In Non-Diabetics, Controlled Diabetics And Uncontrolled Diabetic Patients
EP 701	Juveria Pervin	jazzsultana23@gmail.com	Case Report On Rare Presentation Of Multicentric Tuberculosis
EP 702	Juveria Pervin	jazzsultana23@gmail.com	Dual Diagnosis Of Tuberculosis In Malignancy: A Case Series
EP 703	Pooja Saini	pooja3011.s@gmail.com	Observational Study To Evaluate The Outcome Of Nikshay Mitra Yojana Under Ntep In Western Uttar Pradesh
EP 704	Meghana S A	meghanasa97@gmail.com	Mdr Pulmonary Tb
EP 705	Navaneethakrishnan J	naveenkrishnanj84@gmail.com	A Rare Case Of Primary Laryngeal Tuberculosis Mimicking Malignancy
EP 706	Swetha R	swethadr27@gmail.com	Primary Tuberculous Osteomyelitis Of The Mandible: A Rare Encounter
EP 707	Prasana R	pradeepprasana7@gmail.com	Co-Infection Of Mycobacterium Tuberculosis And Lepvae Complicated By Pulmonary Embolism : A Rare Case Report
EP 708	Shital Purushottam Kabra	shital_kabra21@rediffmail.com	Treatment Outcome Of Isoniazid Mono/Poly Resistant Tuberculosis In Single Centre In Mumbai
EP 709	Abhishek Madhusudan Saini	iamabhisheksaini005@gmail.com	Adverse Drug Reactions In Treatment Of Multi Drug And Pre-Extensively Drug Resistant Tb
EP 710	Dr.Saranya .J	drsaranyaaj@gmail.com	Two Interesting Cases Of Spinal Intramedullary Tuberculoma
EP 711	Nishan U	drnishanu@gmail.com	Tb Presenting As Ards
EP 712	Divyesh Patel	dvsh529@gmail.com	An Observational Cross Sectional Study : Various Diagnostic Approach Of Cervical Tubercular Lymphadenopathy

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 713	Arun Rajendran	iwanowsky@gmail.com	A Rare Case Of Navicular Tuberculosis
EP 714	Madhurima Banoth	sitaramdm14@gmail.com	A Study Of Risk Factors And Hospital Prevalence Of Pulmonary Artery Hypertension In Post Tubercular Pulmonary Sequelae Patients In Government Chest Diseases And Tuberculosis Hospital, Hanamkonda
EP 715	Merugu Neeraja	neerajamerugu161@gmail.com	A Rare Case Report Of Primary Surgical Site Tuberculosis By Mycobacterium Tuberculosis Post Lower Segment Caesarean Section
EP 716	Md.Shujauddin	shuja.hritik@gmail.com	A Rare Case Of Testicular Abscess
EP 717	Mizbah Muzzain Syed	mizbahmuzzain@gmail.com	Clinico-Radiological Profile Of Drug Resistant Tuberculosis In A Tertiary Care Centre
EP 718	Samreen Farooqui	farooquisamreen791@gmail.com	Tb Slithering To The Surface: A Rare Case Of Sternoclavicular Joint Tuberculosis
EP 719	Parv Kumawat	parvpmk@gmail.com	Atypical Presentation Of Pulmonary Tuberculosis Diagnosed By Transbronchial Lung Biopsy
EP 720	Vandana.K	vandanakulai25@gmail.com	A Common Pathology In An Uncommon Site
EP 721	Syed Hissar	syed.hissar@icmr.gov.in	Elevated Circulating Levels Of Acute Phase Proteins Among Hiv Patients With Tuberculosis Coinfection
EP 722	Abdus Samad	abdussamad15253@gmail.com	Rifampicin Induced Pancytopenia
EP 723	Simarpreet Singh	singh.simar1997@gmail.com	Isoniazid Induced Pure Red Aplasia : A Rare Cause Of Anemia In Tuberculosis
EP 724	B.Mehataj	mehataj22@gmail.com	Tuberculosis Of Bonemarrow : A Diagnosis Not To Be Missed
EP 725	Vijaya Kumar	valiantzviijay08@gmail.com	Testicular Tb Masquerading As Malignancy: A Differential To Consider
EP 726	P. Jhansi	pjhansi.dr@gmail.com	The Association Of Clinicrodiological Profile Of Post Pulmonary Tuberculosis Sequelae With Severity Of Pulmonary Artery Hypertension
EP 727	Syed Fayazuddin	fayazuddinsyed9@gmail.com	Loculated Pneumothorax Masquerading As Vanishing Lung Syndrome
EP 728	Manpreet Kaur	manpreet.sandhu215@gmail.com	Wrist Joint Tuberculosis: A Rare Entity
EP 729	Souradip Laha	souradiplaha@gmail.com	Tubercular Lymphadenitis Can Hide Symptoms Of Non-Hogdgin Lymphoma
EP 730	Avi Garg	avirpgmc@gmail.com	Post-Surgical Site Tuberculosis
EP 731	Dr.Bokka Likhitha	likhithab36@gmail.com	Challenges Faced During Antitubercular Therapy
EP 732	Ayisha Thasneem	ayishathellassery@gmail.com	Ubiquitous Disease Proves It'S Presence In An Unforeseen Location In A Post-Surgical Poliomyelitis Patient
EP 733	Dr. P. Sai Spandana	spandanapatibandla11@gmail.com	Rifampicin Induced Erythroderma In A Patient With Pulmonary Tuberculosis
EP 734	Dr Darshana Ke	darshanadevanand@gmail.com	Disseminated Tb- Pulmonary Tb With Ocular Tb Complicated With Rifampicin Induced Thrombocytopenia
EP 735	Dr Anjali V B	vbanjali023@gmail.com	Radiological Outcome In Pulmonary, Pleural Tuberculosis And The Associated Pretreatment Factors
EP 736	Manpreet Kaur	manpreet.sandhu215@gmail.com	Wrist Joint Tuberculosis: A Rare Entity
EP 737	Sakthi Bhalan Pandiarajan	dr.sakthibhalan.p@gmail.com	Disseminated Tb With Tb Ankle Joint
EP 738	Dr S Vijayalakshmi	shiviji2000@gmail.com	Rare Complication Of Cold Abscess Thigh Following Pentavalent Vaccine
EP 739	Guguloth Manosri Sowmya	manosrisowmya@gmail.com	Double Trouble - Pulmonary Tuberculosis In Diabetes Mellitus
EP 740	Kaki Poorna Chandra	poorna.chandra868@gmail.com	Thought To Be Tuberculosis-Turned Out As A Lymphoma
EP 741	Madhav Mahawar	madmahawar@gmail.com	Concomitant Pulmonary Tuberculosis And Borderline Leprosy With Type-ii Lepira Reaction In Single Patient

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 742	Ishita Tripathi	ishitatripathi2916@gmail.com	Medical Thoracoscopy: Shining Light On Diagnosis Of Tuberculosis Effusion
EP 743	Srinivasa I. Chelluri	si.chelluri@gmail.com	Diagnostic Machine Learning For Differentiation Of Tubercular From Malignant Pleural Effusion
EP 744	Anirban Ray	doc.anirbanray4u@gmail.com	A Rare Case Of Multi Drug Resistant Vocal Cord Tuberculosis In A Patient With Systemic Sarcoidosis
EP 745	Tangella Rajeev	rajeevtangella977@gmail.com	Comparison Of The Association Of Bal- Cbnaat On The Basis Of Cycle Of Threshold Value With Time To Culture Positivity
EP 746	Raghavendrun Sivasankar	raghavendrun@gmail.com	Acute Fibrinous Organising Pneumonia Secondary To Pulmonary Tuberculosis: A Case Report
EP 747	Sri Hari Vishnu.R	srihari2597@gmail.com	A Study Of Profile Of Lost To Follow Up Tuberculosis Patients
EP 748	Dr.Imadabathuni Navya Sree	doctornavyasree@gmail.com	Tuberculoma Of Deep Peroneal Nerve: A Rare Case Report
EP 749	Dr Rj Bhavna Srivastav	dr.rjbhavna@gmail.com	Misidentification Of Hepatic Tuberculosis As Cholangiocarcinoma
EP 750	Nirupma Jain	nirupmajain11@gmail.com	Congenital Drug Resistance Tb (Pre-Xdr-Tb)
EP 751	Yeluri Raj Vivek	raj.vivek681@gmail.com	To Study The Inflammatory Markers In Active Pulmonary Tuberculosis, It'S Correlation Wth Disease Severity And It'S Response To Anti Tubercular Treatment
EP 752	Isha Arushi	dr.ishaarushi@gmail.com	Studying Factors In Pulmonary Tb Patient Presenting With Drug Induced Liver Injury: A 10 Month Study
EP 753	S.Pavani	samudanapalepu999@gmail.com	Rifampicin Induced Thrombocytopenia
EP 754	Chitti Anudeep Varma	anudeepvarmachitti@gmail.com	Loculated Tubercular Empyema - Complicated Clinical Spectrum
EP 755	Dev Rishi	spvdrathe@gmail.com	Comparative Study To Find Sensitivity And Specificity Of Sputum And Bronchoalveolar Aspirate (Bal) Cbnaat For Mycobacterium Tuberculosis In Diagnosis Of Sputum Negative Pulmonary Tuberculosis
EP 756	Gyan Prakash Gupta	gyan801@gmail.com	Isolated Adrenal Tuberculosis
EP 757	Keerthana Prakasan P.	krishnakeerthana07@gmail.com	Treatment Outcome Of Multi-Drug Resistant/Extensively Drug Resistant Tuberculosis Patients On Bedaquiline And Delamanid Based Anti-Tuberculosis Treatment: A Prospective Observational Study
EP 758	Nallu Guru Pooja	dr.n.g.pooja@gmail.com	Study On Predictive Value Of Severity Of Illness Score In Mortality Among Patients With Tuberculosis Requiring Intensive Care
EP 759	Leelasai Kumar Chittipothala	leelasai19@gmail.com	Drug Resistant Extrapulmonary Tuberculosis Masquerading As Arthritis
EP 760	Dr. Tapan Vishnubhai Kalani	tapankalani@gmail.com	Tofacitinib Induced Disseminated Tuberculosis In A Patient Of Takayasu Arteritis
EP 761	Vickey Panjiyar	vickynmc75@gmail.com	Miliary Tb Present As Latent Infection: A Rare Presentation!
EP 762	Varshni P V	varshni16@gmail.com	Overlap Of Nonspecific Interstitial Pneumonitis Over Tuberculosis In An Elderly
EP 763	Kowsika R	kowsika.raju.7@gmail.com	Tuberculous Tenosynovitis: A Rare Case Report
EP 764	Vickey Panjiyar	vickypanjiyar@gmail.com	Miliary Tb: A Rare Presentation
EP 765	Sumanth Kumar Chirimarri	chirimarrisumanth@gmail.com	Diagnosis Utility Of Pleural Fluid Ada: Serum Crp Ratio
EP 766	Juveria Pervin	jazzsultana23@gmail.com	Dual Diagnosis Of Tuberculosis In Malignancy: A Case Series
EP 767	Dr Ashutosh Rout	arout1481@gmail.com	Radiological And Functional Sequelae Of Pulmonary Multidrug Resistant Tuberculosis At The Completion Of Treatment

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 768	Somya Sucharita Panda	somyapanda2892@gmail.com	To Determine Association Of Oxidative Stress And Vitamin E Levels In Newly Diagnosed Smear Positive Pulmonary Tuberculosis Cases
EP 769	Abinash Dandasena	abinashdandasena79@gmail.com	Tuberculous Gumma In Disseminated Tb : A Case Report
EP 770	Pratima Dhurka	pratimadhurka2013@gmail.com	A Comparative Study On Rate Of Sputum Conversion And Treatment Outcome Among Tuberculosis Patients With And Without Diabetes Mellitus On Antituberculosis Treatment
EP 771	A Vasudevan	avasudevan6@gmail.com	Rapid Diagnosis Of Tubercular Lymphadenopathy By Cartridge Based Nucleic Acid Amplification(Cbnaat) And Its Corelation With Ziehl Neelsen Staining On Fine Needle Aspiration Cytology Technique
EP 772	Najma.N	najmanalakath79@gmail.com	A Comparative Study Of Clinico-Radiological Profile And Treatment Outcome Of Pulmonary Tuberculosis In Smokers And Nonsmokers At A Tertiary Care Center In Telangana
EP 773	Aravind Vadlamudi	aravindvadlamudi13@gmail.com	Tb Elbow: A Case Series
EP 774	Sumalata	stdcepidemiologist@gmail.com	Analysis Of Factors Affecting Presumptive Examination Rate And Understanding District Wise Issues From The Last Eight Years In The State Of Telangana
EP 775	Ramalingam Bethunaickan	bramalingam@gmail.com	Influence Of Cyp27B1 Gene Rs118204012 Polymorphism Genotype With Vitamin D Deficiency And Risk Towards Pulmonary Tuberculosis
EP 776	Dr. Jagmohan Sv	drjagmohan99@gmail.com	Clinico-Radiological Spectrum Of Pulmonary Tuberculosis In Diabetics And Non-Diabetic Patients At Tertiary Care Centre
EP 777	Ahishek Shukla	abhishekkingofkings@gmail.com	A Case Of Generalised Maculopapular Rashes To Three Anti Tubercular Drugs Namely Rifampicin , Pyrazinamide , And Streptomycin
EP 778	Karikalan Nagarajan	drkarikalan82@gmail.com	Wings Of Support : A Field Report On Psycho Social Support For Tb Persons And Caregivers To Build Resilience
EP 779	Parthiban Kalimuthu	parthibantck@gmail.com	Rare Presentation Of Tuberculosis: A Case Report
EP 780	Akshaya.N	natarajanakshaya032@gmail.com	Tubercular Tenosynovitis In Radial And Ulnar Bursa: A Rare Presentation
EP 781	N Saravanan	natrajan.s@icmr.gov.in	Nanodelivery System For Therapeutic Application In Tb
EP 782	Gauri Gupta	gggauri12@gmail.com	The Utility Of Ratio Of Pleural Fluid Lactate Dehydrogenase To Adenosine Deaminase In Pleural Tuberculosis In Western Uttar Pradesh
EP 783	Anvesh Akhii	anveshd05@gmail.com	A Case Of Rifampicin Induced Anti-Hypertensive Failure
EP 784	Thasni A Sherief	tthasni.sherief85@gmail.com	Estimating Total Delay In Diagnosing Pulmonary Tuberculosis In Patients Presenting To A Tertiary Care
EP 785	Mohit Kondisetti	kmohit1998@gmail.com	Diffusion Capacity And 6 Minute Walk Test In Patients Who Have Suffered From Pulmonary Tuberculosis
EP 786	Tamizhan S	tamilanseran@gmail.com	Accidental Finding Of Tracheal Diverticulum In A Case Of Disseminated Tuberculosis: A Case Report
EP 787	Syeda Tasneem Begum	syedatasneem506@gmail.com	Incidence And Detection Of Mdr -Mtb In Hyderabad Population Using Pcr -Sequencing Method
EP 788	Dr Santosh Kumar Bairwa	drskbairwa82@gmail.com	Occurrence Of Diabetes Mellitus With Rifampicin Resistance In Patients Of Pulmonary Tuberculosis
EP 789	Dr. Malavika	maluvika.p@gmail.com	A Rare Case Of Refractory Hypoxemia And Hemoptysis In Patient With Heterotaxy Co-Existence With Extra Pulmonary Tuberculosis
EP 790	Berti Louis	bertielouis05@gmail.com	Unveiling The Shadows: Exploring Hyperpigmented Lesions In The Tracheobronchial Tree
EP 791	Afshan Sadaf	afshansadaf.as@gmail.com	Mdr-Tb Presenting As Multiple Abscesses In Immunocompetent Patient

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 792	Shraddha Rathod	rathodshraddha99@gmail.com	Drug Resistant Tuberculosis
EP 793	Dr.Janhavi Khalate	khalatejanhavi97@gmail.com	A Rare Case Of Anti-Koch'S Treatment (Akt) Induced Megaloblastic Anemia
EP 794	Darshan Kumar Bajaj	drdkbajaj@rocketmail.com	Shorter Oral Mdr-Tb Regimen: Is It Really A Solution For Drtb
EP 795	K.Venugopal	dtovenu@gmail.com	Is Diabetic In Females A Risk Factor For Development Of Tuberculosis
EP 796	Jay Prakash Shukla	jay.sanode@gmail.com	Pleural Effusion Cause Mdr Tuberculosis With Drug Induced Peripheral Neuropathy
EP 797	Kamalpreet Singh	drkpsarora@gmail.com	Role Of Bronchoscopy In Clinicoradiologically Suspected Pulmonary Tuberculosis Patients And Associated Secondary Infection
EP 798	Nabhan Nasir Parol	nabhanp@gmail.com	Cerebellar Tuberculoma
EP 799	Sivani Chennupati	sivanichennupati9@gmail.com	Predictors Of Relapse Among Pulmonary Tuberculosis Patients Treated In Dots Program
EP 800	Gunda	prashanthgunda369@gmail.com	Advantage Of Truenat/Cbnaat At Point Of Care For Rapid Detection Of Mycobacterium Tuberculosis For Early Diagnosis, Treatment And Compliance
EP 801	Rushikesh Katakam	rushikesh4510@gmail.com	Prevalence And Pattern Of Drug Resistance In Pulmonary Tuberculosis Patients Having Previous History Of Antitubercular Therapy And Newly Diagnosed Patients
EP 802	Koppula Sumasri	drsumareddy1996@gmail.com	Various Presentations Of Extra Pulmonary Tuberculosis And Their Management- A Case Series
EP 803	Dr Vegunta Vani Vineela	vanivineela.vegunta@gmail.com	Diagnostic Yield Of Cbnaat Vs Crs In The Diagnosis Of Extrapulmonary Tuberculosis
EP 804	Dr.Bala Kishorenaik	dr.balakishore@gmail.com	A Rare And Unusual Presentation Of Miliary Tuberculosis
EP 805	Palasani Maheswara Reddy	maheshrdybtcd@gmail.com	A Case Of Tubercular Pleural And Pericardial Effusion
EP 806	Dr A.Raveena Raju	raveenaraju1210@gmail.com	Bilateral Pyo-Pneumothorax: A Rare Case Report
EP 807	Souradip Laha	souradiplaha@gmail.com	Tubercular Lymphadenitis Can Hide Symptoms Of Non- Hodgkin Lymphoma
EP 808	Manasa Yeluri	nasa658@gmail.com	Diaphragmatic Hernia Mimicking Mediastinal Lipoma
EP 809	Y Sushanth Reddy	yennamsushanthreddy@gmail.com	Beyond Recovery: Unveiling The Lingering Effects Of Covid-19 In Survivors
EP 810	Sajan.V.Limbachiya	sajanlibachiya933@gmail.com	Bird Fanciers Lung Disease With Atopic Triad In Laundry Worker With Hay Fever, Pulmonary Tuberculosis With Asthma And Occupational Dermatitis
EP 811	Athul Francis	athulfrancis48@gmail.com	Recurrent Thromboembolism In A Case Of Combined Anti Thrombin Iii And Protein C Deficiency
EP 812	Dr. Nazia Sultana	doc.nazia5@gmail.com	A Cross Sectional Study On Clinico-Radiological Pattern In Patients With Pulmonary Tuberculosis-Hiv Coinfection And Its Correlation With Cd4 Cell Counts
EP 813	Dr. Rathnakar Kusuma	rathnakarkusuma@gmail.com	The Study Of Tubercular Lymphadenitis And Therapeutic Response To Conventional Att
EP 814	Dr.Swetha Ravi	swethadr27@gmail.com	Correlation Of High- Resolution Ct Findings And Functional Impairment Using Faced Score With Health-Related Quality Of Life (St.George Respiratory Questionnaire Score) In Bronchiectasis
EP 815	Anand Sivaraj R	anandsivarajr@gmail.com	Pneumonic Type Adenocarcinoma
EP 817	B.Sravya	sravyareddy.bojja@gmail.com	Anti Synthetase Syndrome In A Young Adult: Rare Presentation Of A Rare Disease
EP 818	Ankita Chakraborty	drankitac97@gmail.com	A Case Report Of Rare Aggressive Mediastinal Tumour In A Middle Aged Male Showing Granulomatous Pathology Presented With Superior Vena Cava Syndrome-Oral Presentation
EP 819	Prateek Kumar Dubey	prateekaiims840@gmail.com	Lung Cancer Associated With Neurofibromatosis Type I: A Rare Case Report

NAPCON 2023 E-Poster Presentation

EP No.	Presenting Author	e-mail	Topic
EP 820	Deepthi Devara	drdeepudevara@gmail.com	Respiratory infections (non-TB)
EP 821	Dr MD Shujauddin	shuja.hritik@gmail.com	Occupational, environmental and other Miscellaneous Respiratory conditions
EP 822	Ramanuj Sinha mahapatra	ramanujsinhamahapatra@gmail.com	Tuberculosis and EPTB
EP 823	Sana Arshy	sanarshy@gmail.com	Occupational, environmental and other Miscellaneous Respiratory conditions
EP 824	Dr. Stuti Gupta	guptastuti1190@gmail.com	Tuberculosis and EPTB
EP 825	Sarvesh Vigram	sarveshigramnk14@gmail.com	Tuberculosis and EPTB
EP 826	Rishitha	rishita.nig29@gmail.com	Lung Cancer, chest malignancies and end of life issues
EP 827	Girija Shankar Udgata	girijaudgata777@gmail.com	Lung Cancer, chest malignancies and end of life issues
EP 828	Dr. Manikiran Reddy	reddymanikiran11@gmail.com	Diagnostic and interventional Pulmonology and issues related to lung surgeries

IJCP Copyright 2023 IJCP Publications Ltd. All rights reserved.

The copyright for all the editorial material contained in this lies with NAPCON Organizing Committee in the form of content, including images. No part of this publication may be published in any form whatsoever without the prior written permission. The Copyright, in the form of layout and design, is held by IJCP Publications Pvt. Ltd.

Published by IJCP Academy of CME, New Delhi, as a part of its social commitment towards upgrading the knowledge of Indian doctors.

Disclaimer: Although great care has been taken in compiling and checking the information given herein to ensure that it is accurate, the publisher shall not be in no way directly or indirectly responsible for any error, omissions or inaccuracy in this publication whether arising from negligence or otherwise. IJCP Publications Pvt. Ltd. does not guarantee, directly or indirectly, the quality or efficacy of the product or service described in the advertisements or other material which is commercial in nature in this publication.