



CME FOUNDATION OF INDIA



Emerging Role of Cefpodoxime in AECS in the Indian Real-World Setting

EVENT REPORT

The Physician Gamut

The Physician Gamut, held on 28th & 29th December, 2024, at Ramada by Wyndham JHV, Varanasi, was organized by **CME Foundation of India (CMEFI)**, a registered Association of Persons (AOP), dedicated to enhancing the skills and knowledge of healthcare professionals, through continuing medical education activities.

Dr. Agam C. Vora, a renowned chest physician shared his valuable insights on “**Acute Exacerbations of Chronic Bronchitis**”, and **Prof. Dr. Madhukar Rai**, a distinguished endocrinologist highlighted the topic “**Cefpodoxime in the Management of Respiratory Tract Infections.**”

The event explored the challenges faced by healthcare professionals in the treatment and management of acute exacerbations of chronic bronchitis (AECB). Key issues discussed included the difficulty in early and accurate diagnosis, the rising prevalence of antibiotic resistance, and challenges in ensuring patient adherence to treatment regimens. The need for improved diagnostic tools, personalized treatment approaches, and enhanced patient education to address these barriers effectively was discussed. Preventive strategies, including lifestyle modifications and vaccination, were also highlighted as crucial for reducing the frequency and severity of exacerbations.

Date: 28th & 29th December, 2024

Venue: Ramada by Wyndham JHV, Varanasi

Total Participants: 52

Agenda



28th December, 2024



7:00 pm onwards

Topics	Speakers	Duration
Welcome		7:00 pm – 7:05 pm
Introduction		7:05 pm – 7:15 pm
Lecture: Cefpodoxime in the Management of Respiratory Tract Infections	Prof. Dr. Madhukar Rai	7:15 pm – 7:45 pm
Acute Exacerbations of Chronic Bronchitis	Dr. Agam C. Vora	7:45 pm – 8:50 pm
Emerging Role of Cefpodoxime in AECB in the Indian Real-World Setting		
Vote of thanks		8:50 pm – 9:00 pm

Summary of the Conclave

CMEFI team warmly welcomed the distinguished speakers, **Dr. Agam C. Vora** and **Prof. Dr. Madhukar Rai**.

Cefpodoxime in the Management of Respiratory Tract Infections – Prof. Dr. Madhukar Rai

Dr. Madhukar highlighted the global prevalence of respiratory tract infections (RTIs), noting that acute respiratory infections (ARI) affect 20-30% of the population, with lower respiratory tract infections being the leading infectious cause of death worldwide, accounting for nearly 3.5 million deaths annually. He emphasized the importance of early detection and appropriate treatment, especially as unresolved upper RTIs can lead to more severe complications. In clinical presentation, he discussed symptoms of lower respiratory tract infections, including fever, chills, cough, chest pain, and respiratory distress, which may sometimes necessitate mechanical ventilation. Pneumonia, marked by breathlessness, pleuritic chest pain, and cough, was identified as a critical condition that requires prompt and effective management.

Dr. Madhukar also discussed the role of Cefpodoxime Proxetil in managing various respiratory conditions such as acute sinusitis, tonsillopharyngitis, and community-acquired pneumonia (CAP). He talked about how Cefpodoxime has proven clinical efficacy in treating acute sinusitis, comparing favorably against other antibiotics like cefaclor and amoxicillin. For tonsillopharyngitis, he mentioned studies showing that Cefpodoxime was more effective than penicillin. He emphasized that Cefpodoxime's effectiveness extends to CAP, particularly in vulnerable patients, where it has shown comparable results to ceftriaxone in terms of clinical and bacteriological outcomes.

He also discussed the importance of identifying the causative organisms in pneumonia and the challenges involved, particularly in cases involving multiple bacterial strains. Dr. Madhukar shared insights from a multicenter study that compared the efficacy of Cefpodoxime Proxetil with ceftriaxone in vulnerable patients with bronchopneumonia. The study demonstrated that both antibiotics provided similar results, though Cefpodoxime Proxetil was noted for its good clinical tolerance. Dr. Madhukar concluded that Cefpodoxime Proxetil is a highly effective and safe option for managing RTIs, including in patients with additional risk factors, offering both efficacy and patient safety in a variety of respiratory conditions.

Acute Exacerbations of Chronic Bronchitis – Dr. Agam C. Vora

Dr. Agam highlighted the significant burden of chronic obstructive pulmonary disease (COPD) globally, emphasizing its rise despite advancements in understanding, treatment, and prevention over the last few decades. He discussed the evolving definitions of COPD, particularly the GOLD 2023 definition, which characterizes the disease as a heterogeneous lung condition resulting from abnormalities in the airways and/or alveoli. Despite better management strategies, COPD remains the third leading cause of death worldwide, with a high incidence of comorbidities like heart failure and depression. Dr. Agam also pointed out that in India, COPD is the second most common cause of death from non-communicable diseases, further underlining the urgency of addressing this condition.

Dr. Agam explained the critical concept of acute exacerbations of chronic bronchitis (AECB) in COPD, which can be triggered by infections (viral or bacterial) or environmental factors such as pollution. He stressed that

exacerbations are classified as mild, moderate, or severe, with severe cases requiring hospitalization. He outlined the importance of early recognition, highlighting symptoms like increased dyspnea, cough, and sputum production, which are key indicators of exacerbation. He also emphasized that exacerbations significantly affect the patient's quality of life, increasing the risk of death and re-hospitalization, particularly if not managed effectively.

In the treatment of AECB, Dr. Agam discussed the choice of antibiotics, stressing the importance of tailoring therapy based on local resistance patterns. He recommended antibiotics like amoxicillin-clavulanic acid, macrolides, and third-generation cephalosporins while advising against the overuse of quinolones due to their association with resistance. He also touched on the rise in antibiotic resistance globally, noting that by 2050, antimicrobial resistance (AMR) could lead to millions of deaths annually. Dr. Agam shared his clinical experience, stating that third-generation cephalosporins, such as Cefpodoxime, are often the best treatment option in the current scenario due to their safety profile and effectiveness.

Dr. Agam concluded by highlighting the role of Cefpodoxime in the treatment of AECB, particularly due to its broad-spectrum activity against both gram-positive and gram-negative bacteria, including resistant strains. He presented clinical evidence that Cefpodoxime is as effective as amoxicillin-clavulanic acid in treating bacterial lower respiratory tract infections, including AECB. Dr. Agam also noted that Cefpodoxime's high efficacy, good tolerability, and ability to inhibit bacterial cell wall synthesis make it an ideal choice for mild to moderate infections. He emphasized the importance of clinical judgment, appropriate antibiotic use, and timely interventions to prevent the negative outcomes of exacerbations, such as respiratory failure and increased mortality.

Emerging Role of Cefpodoxime in AECB in the Indian Real-World Setting – Dr. Agam C. Vora

A real-world survey was conducted using the provided questionnaire to gather insights on the topic “Emerging Role of Cefpodoxime in AECB in the Indian Real-World Setting.” The analysis report of the survey was presented on screen to the participating doctor by Dr. Agam C. Vora. The discussion centered around the responses to the questionnaire and highlighted key findings regarding management of Cefpodoxime in AECB management.

- **Age range of AECB patients**

The majority of the doctors indicated that the typical age range for patients suffering from AECB was 50-60 years. While older age groups were also mentioned, this age group was highlighted as most common in practice. Doctors discussed how chronic respiratory conditions often emerge in individuals in their 50s, exacerbated by other risk factors like smoking or environmental pollution. The 50-60 years' group, being more active yet prone to respiratory complications, seemed to fit the patient profile the best.

- **Key symptoms of AECB**

Cough with expectoration emerged as the primary symptom associated with AECB, with the majority of doctors agreeing on this. While fever and malaise were also noted as symptoms, cough with sputum was emphasized as a significant indicator. The discussion centered around the fact that coughing with mucus production is a hallmark of AECB, typically caused by inflammation and infection in the airways. This symptom is often the first to be treated and monitored by physicians.

- **Comorbid diseases in AECB patients**

The most common comorbidities among AECB patients were found to be diabetes and hypertension, as per the majority of the doctors. These conditions are prevalent in the Indian population, particularly among older adults, and can complicate the management of AECB. During the discussion, it was pointed out that hypertension and diabetes require careful monitoring, as both can exacerbate respiratory issues and hinder recovery, necessitating adjusted treatment plans for AECB patients.

- **Previous antibiotic treatment and response to prior therapy**

The majority of patients had been treated with other antibiotics before, but they did not show a positive response. This highlighted significant concerns regarding antibiotic resistance or the inadequacy of the initial treatment. Most doctors noted that 4 out of 10 patients failed to respond to the first round of antibiotics, underscoring the persistent nature of the infection despite early interventions. The discussion focused on the need for careful and timely adjustments in antibiotic selection, particularly in managing AECB, where bacterial resistance can complicate treatment. Doctors emphasized the importance of considering a patient's individual response to therapy, as well as the potential need for switching to more effective antibiotics based on evolving resistance profiles. This insight reinforced the complexity of AECB management, urging the need for tailored, responsive treatment plans.

- **Fever resolution after Cefpodoxime treatment**

The majority of patients saw their fever resolve within two days of starting Cefpodoxime. This quick reduction in fever was considered a positive outcome by the doctors, indicating that Cefpodoxime is effective in addressing the underlying infection rapidly. The physicians discussed how a rapid reduction in fever is often used as a marker for the initial effectiveness of the antibiotic treatment.

- **Symptom improvement after Cefpodoxime treatment: Cough and malaise**

Doctors observed that while fever resolved rapidly, the reduction in cough with expectoration took longer, with most patients showing improvement by the third day of Cefpodoxime treatment. This delay was attributed to the ongoing inflammatory processes in AECB, where symptoms like cough persist despite the resolution of fever. The discussion emphasized that while fever often subsides quickly, other symptoms such as cough may require more time for full recovery. On the other hand, malaise, a common symptom of AECB, improved notably by the second day of treatment for the majority of patients. The prompt alleviation of malaise was seen as a strong indicator of Cefpodoxime's efficacy, improving the patients' overall comfort and contributing to a faster recovery. Doctors highlighted that quicker improvement in malaise significantly enhances the patient's quality of life during treatment, further supporting Cefpodoxime's role in managing AECB.

- **Complete clinical cure after Cefpodoxime treatment**

Nine out of ten patients had a complete clinical cure after treatment with Cefpodoxime. This high cure rate was discussed as a significant benefit of using Cefpodoxime for AECB. Doctors noted that a full recovery was achieved for most patients, with the drug being particularly effective in treating AECB, even in complex cases. The importance of choosing the right antibiotic was underscored, as it directly contributed to achieving clinical success.

- **Need for additional antibiotics**

In two out of ten patients, another antibiotic was required alongside Cefpodoxime. This was discussed as a result of factors such as more severe infections or the presence of antibiotic-resistant strains of bacteria. The doctors emphasized the importance of evaluating each case individually and being prepared to combine therapies for better outcomes, especially in patients with complicated AECB cases or comorbid conditions.

- **Hospitalization requirement**

The survey showed that one out of ten patients required hospitalization, a factor that was particularly relevant for those with more severe or complicated cases of AECB. The discussion focused on the need to monitor patients closely, especially those with additional health complications such as heart disease or diabetes. While most AECB cases can be managed on an outpatient basis, hospitalization is still necessary for a small proportion of patients who show worsening symptoms.

- **Cardiac safety in choosing Cefpodoxime**

The majority of doctors chose Cefpodoxime over azithromycin primarily due to its superior cardiac safety profile. This was a significant consideration, particularly for patients with pre-existing cardiovascular conditions. Doctors discussed the increased risk of QT prolongation associated with azithromycin and noted that Cefpodoxime's better safety profile made it a preferred option for managing AECB, especially in the elderly or those with heart disease.

- **Immunity status of AECB patients**

Two out of ten patients had poor immunity, which was considered a major factor in their response to treatment. The doctors discussed how immunocompromised patients are more vulnerable to severe infections and require more intensive and prolonged treatment. It was pointed out that these patients may not respond as quickly to Cefpodoxime and may need additional interventions to manage the infection effectively.

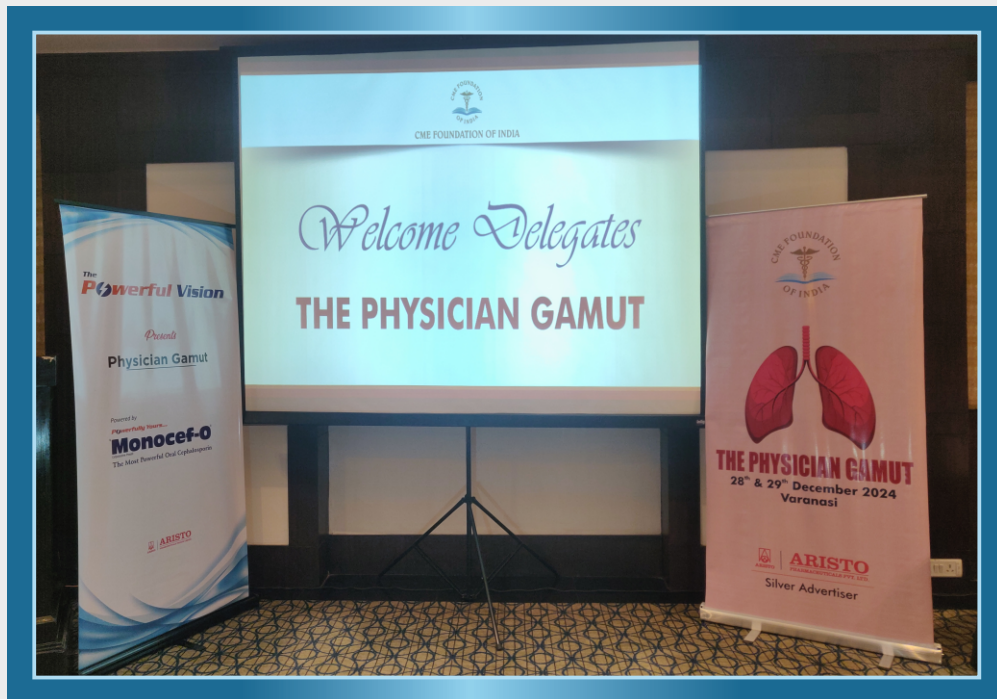
- **Efficacy and safety of Cefpodoxime in AECB treatment**

The majority of doctors rated the efficacy of Cefpodoxime as excellent in treating AECB, highlighting its rapid action in resolving critical symptoms such as fever and cough. The discussion centered on how Cefpodoxime effectively controls bacterial infections, reducing symptoms and the need for additional antibiotics, which reinforces its value as a primary treatment option for AECB. Doctors emphasized that this quick symptom resolution plays a key role in improving patient outcomes. In terms of safety, Cefpodoxime was also rated highly, with most doctors reporting minimal adverse effects during treatment. This favorable safety profile was particularly valued in elderly patients and those with multiple comorbidities. The doctors agreed that the drug's excellent safety, combined with its efficacy, makes it an ideal choice for managing AECB, offering both clinical effectiveness and patient safety.

At the end of this Conclave, the CME Foundation of India extended its sincere gratitude to the attending delegates and acknowledged Aristo Ltd., the industry partner, for their valuable support and contribution to the success of the Conclave.

Snapshots of Conclave

Welcome to The Physician Gamut



Registration Counter



Cefpodoxime in the Management of Respiratory Tract Infections



Acute Exacerbations of Chronic Bronchitis



Emerging Role of Cefpodoxime in AECB in the Indian Real-World Setting



Delight Attendees Through an Exceptional Conclave Experience



Branding Opportunity





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