

Category : **Sepsis/septic shock: management**

A254 - Outbreak of *Stenotrophomonas maltophilia* pneumonia in ICU-COVID-19 patients

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Introduction:

Secondary bacterial pneumonia is an important complication of many viral illnesses particularly in ICU COVID-19 patients. It contributes to the high morbidity and mortality in this vulnerable population. Pathogens are variable and includes Pseudomonas, Klebsiella, Acinetobacter and Staphylococcus species. Recently a new surge of many environmental bacteria was described particularly Stenotrophomonas Maltophilia. The aim of this study is to determine the prevalence of this new outbreak of Stenotrophomonas Maltophilia pneumonia in COVID-19 ICU patients.

Methods:

This study was conducted in a tertiary university hospital with a setting of 23 ICU beds. All COVID ICU patients admitted between March 2020 and April 2021 were analyzed.

Statistical analysis were conducted to determine the prevalence of bacterial secondary pneumonia and those caused by Stenotrophomonas maltophilia.

Results:

155 ICU COVID admitted patients with 76% men were analyzed. Mean age is 66.5 (13.5) years and APACHE score was 13.2 (6.5). Mean ICU stay was 15.2 (15.7) days. 42 (27.5%) nosocomial pneumonia events were diagnosed. The most common isolated pathogens were Stenotrophomonas Maltophilia (41%), Pseudomonas (26%), Enterobacteriaceae (23%), Staphylococcus (2%) and fungal infections (3%). Death was reported in 45 patients (29%).

Conclusion:

ICU-COVID-19 patients have a multifactorial immunosuppression and are prone to nosocomial bacterial pneumonia. Stenotrophomonas Maltophilia, a resistant environmental bacteria, is now leading the incriminate pathogens. This outbreak is worrisome and can contribute to the high mortality rate during their long ICU stay.