
**“CLINICAL PROFILE AND MORTALITY PREDICTORS OF
COMMUNITY ACQUIRED PNEUMONIA IN ELDERLY
ADMITTED AT A TERTIARY CARE HOSPITAL IN NORTH
KARNATAKA”**

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ABSTRACT

BACKGROUND AND OBJECTIVES: Community-acquired pneumonia (CAP) in elderly has different clinical presentation and higher mortality than CAP in other age group. Clinical presentation may vary from mere presence of fever to altered sensorium. This study was done to predict the mortality indicators of community acquired pneumonia in elderly and to identify common presentations & clinical features of community acquired pneumonia among elderly.

METHODS: This is a hospital based prospective study among 100 elderly patients in department of General Medicine in SDM College of Medical Sciences and Hospital, Dharwad, Karnataka from June 2021 to May 2022 among the elderly patients admitted to medical wards and MICU with community acquired pneumonia. Patients aged more than 65 years with clinical symptoms like fever, cough with or without expectoration, pleuritic chest pain, dyspnea, and altered sensorium along with signs like tachypnea, reduced chest movements, dull percussion note, bronchial breath sounds, increased vocal fremitus, and vocal resonance and crepitations with radiological evidence of pneumonia without any clinical evidence of pneumonia were included in the study. Cases with Hospital Acquired Pneumonia, HIV positive, tuberculosis and lung malignancies were excluded. Informed written consent was obtained before collecting the data and examination. Case was evaluated by asking the history, relevant clinical examination and investigations. The information collected was entered in Microsoft Excel and analyzed using SPSS 20 software. Appropriate tests of significance such as Chi square test, student's test were used to

test the association between the variables. Statistical significance was set at 0.05% level of significance ($p < 0.05$).

RESULTS: There were total 100 elderly patients with Community Acquired Pneumonia enrolled for the study. Majority were in the age group of 65-74 years (56%) and 67% males. When studied about hospital stay and duration of symptoms, 68% were admitted for 1-10 days and 89% had symptoms for 1-10 days. Most common symptom presented was cough with expectoration (78%) and dyspnea (66%). Altered sensorium was seen among 20% cases. 15% had reduced chest movements, 84% had increased vocal fremitus, 49% had impaired note, 46% had bronchial breathing, 98% had crepts on auscultation and 1 case had pleural rub. 67% had anemia, 40% had leucocyte count of more than 11,000 cells/ mm³, 12% had albumin levels more than 3.5g/dl, 2% had hypernatremia, 57% had hyponatremia and 17% had hypokalemia. It was seen that 30 participants were at intermediate risk of 30 day mortality whereas 70 had high risk of mortality by CURB scoring. Mortality rate in our study was 24%. The significantly associated variables with outcome were age, gender, duration of hospital stay, habits, requirement of mechanical ventilation, pulse rate, respiratory rate, procalcitonin levels, total bilirubin, urea and CURB score in prediction of mortality.

CONCLUSION: Elderly patients with community acquired pneumonia have different clinical presentation and higher mortality. Elderly patients with pneumonia may not exhibit many respiratory symptoms and may instead present with geriatric syndromes like delirium, which could delay the diagnosis and start of therapy.

KEY WORDS: Community Acquired Pneumonia, clinical features, elderly, mortality.