



Role of Serum C - reactive protein Levels in Differentiation of Parapneumonic, Tubercular and Malignant Pleural Effusions.

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I. INTRODUCTION:

Pleural effusion is a common complication associated with number of diseases. Among transudative and exudative effusions, determining the cause of exudative effusions is more difficult. CRP which is an acute phase protein of hepatic origin increases significantly in inflammatory pleural effusions.

II. AIMS AND OBJECTIVES:

To evaluate the serum CRP role in the differential diagnosis of parapneumonic , tubercular and malignant effusions .

III. MATERIALS & METHODS :

It is a prospective observational study conducted on 100 patients admitted in Govt. CD and TB hospital Hanamakonda during the period of January 2016 to May 2017. Etiology of pleural effusion was diagnosed on the basis of clinical presentation, chest X ray , thoracentesis , pleural fluid analysis & pleural biopsy .Serum CRP was measured in all the effusion cases by Turbidometric Immunoassay on auto analyser .CRP values are given in mg/L.

IV. RESULTS:

Out of 100 exudative pleural effusion ,Tuberculosis was the commonest cause contributing 48% which is common in the middle age between 26-36yrs with male predominance 56.25%. Malignant pleural effusions contributes to 32% with age group 59-69yrs with male predominance of 65.6%.Parapneumonic effusions are more in the age group 26-36yrs with male predominance 65%.Serum CRP values are higher in parapneumonic effusions with mean 9.85 ± 2.41 followed by tubercular effusions 3.2 ± 0.64 .Of the malignant pleural effusions 34.37% has serum CRP values ; 3mg/l which may have poor prognosis and outcome. The serum CRP was 2- 4.5mg/l in tuberculosis; 3mg/l in malignancy and ;7mg/l in parapneumonic effusions.

V. CONCLUSION:

Serum C- Reactive Protein values are highest in Parapneumonic effusions. Among Tubercular and Malignant effusions Serum CRP values are lower in malignant compared to Tubercular effusions. In malignant effusions, serum CRP ≥ 3 mg/L, may have a poorer outcome. Serum CRP can be used as prognostic indicator in malignant effusions.