Diagnostic value of uric acid in pleural effusion

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Abstract
The pleura transmits the force generated by the respiratory muscles to the lungs. Therefore, during normal respiration, there is a pressure negative to that of the atmosphere within the pleural space. Pleural space is in a dynamic state, 30 to 75% of the water being turned over every hour. Proteins and particles are turned over much less rapidly being absorbed by lymphatics only. Any disease that causes inflammatory or neoplastic change in the parietal pleura is likely to decrease protein reabsorption and therefore alter fluid hydrodynamics in such a way as to increase the size. The differentiation between exudates and transudates is the initial step in the analysis of pleural effusion as it often gives an indication of the underlying physiologic process, the differential diagnosis and the need for further investigations. Uric acid as an end product of purine metabolism was found to increase in clinical conditions associated with tissue hypoxia. Recently, a role has been suggested for uric acid in differentiation between exudative and transudative pleural effusions. This study was carried out on twenty patients admitted to Kasr El Aini hospital having pleural effusion. All patients were subjected to the following: History taking, Clinical examination, Chest X-rays (PA lateral), Thoracentesis with assessment of the pleural fluid for: Proteins, LDH, uric acid, bacteriological and cytological examination Serum measure Proteins, LDH and uric acid.

Keywords
Pl. effusion, Uric acid,