

## P58. ASSESSMENT OF CA125 AND CA19-9 IN SILICOSIS

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Silicosis characterized by the development of pulmonary fibrosis with progressive impairment of pulmonary function is caused by the inhalation of silica particles. The serum tumor markers, because of several immunological and inflammatory functions have been shown to be increased in non-malignant lung diseases. This study was designed to investigate the clinical significance of tumor markers in patients with silicosis.

29 male patients aged between 23-73 diagnosed with occupational disease related to silica intoxication in Ankara Occupational Diseases Hospital and age/sex-matched control group consisted of 30 healthy volunteers were recruited. Silicosis patients were diagnosed depending on their chest radiograms in accordance with the ILO2000 guidelines. CA19-9 and CA125 concentrations were detected in fasting sera using chemiluminescence enzyme immunoassay.

The serum tumor marker concentrations of patients with silicosis were compared with healthy controls. Patients with silicosis had significantly higher ( $p < 0,05$ ) levels of CA125 (10,95 U/mL (0,8-76,80) than controls (8,65 U/mL (3,50-20,30)). However, there were no significant differences in CA19-9 between the groups ( $p > 0,05$ )

CA125 is expressed by tissues including the mesothelial lining cells of peritoneum, pleura, and pericardium. Any physiologic or pathologic reactions of these cells cause an increase of serum CA125 level. Chronic inflammation of mesothelial cells of pleura may also cause a similar response. Inflammation also plays an important role in the development of silicosis. Increased CA125 concentrations in silicosis are possibly associated with inflammation and seem to be a possible biomarker to be used in silicosis patients.