

## **P57. OXIDATIVE STRESS STATUS IN LEAD EXPOSED WORKERS**

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Lead is a widespread heavy metal that can persist in water, plants and soil in environment naturally. When it is used in some industries, it turns to destructive and toxic form. Human exposure can be associated with the use of lead containing ceramic dishware, food cans and paints besides the exposure in the workplace. One of the most possible mechanisms that cause Pb-induced toxicity is oxidative stress. We aimed to evaluate TAS (total antioxidant status), TOS (total oxidant status) and OSI (oxidative stress index) levels in patients with lead exposure.

30 workers with chronic lead exposure who admitted to Ankara Occupational Diseases Hospital and 35 healthy controls were included in the study. The workers were from 50% battery (n=15), 30% welding (n=9) and 20% recycling (6) factories. TAS, TOS levels were measured in blood samples and OSI was calculated according to formula (TOS/TAS).

TOS levels were significantly higher in patient group (p=0.001). There was no significant difference in terms of TAS levels. Calculated OSI levels were significantly higher in patient group (p<0.001).

Our data confirms that lead exposure is associated with increased oxidative stress. TAS, TOS and OSI levels can be used to evaluate antioxidant-oxidant balance in lead exposure.