S48. Mercury Intoxication In A 3-year-old Boy

Meşide Gündüzöz¹, Lütfiye Tutkun², Vugar Ali Türksoy², Murat Büyükbekerci¹, Servet Birgin İritaş³, Sinan Karacabey², Ömer Hınç Yılmaz⁴
¹ankara occupational diseases hospital
²bozok university
³council of forensic medicine ankara
⁴yıldırım beyazıt university

INTRODUCTION
Mercury is a toxic substance. Scientific experiments using mercury are still performed in some laboratories in schools. Mercury evaporates in the room temperature and enters the body by inhalation. Smaller children are prone to toxic effects of mercury. We report an intoxication case with mercury marbles brought home from a school laboratory.

CASE
A 3-year-old boy was brought to our clinic for gait disturbance, skin rash, hoarseness, insomnia, restlessness, recurrent infections and mental decline. On exam, his lower extremities were edematous, fingertips were hyperemic, cheeks were erythematous, deep tendon reflexes could not be elicited, muscle tones were slightly decreased. EMG was reported as mild sensory loss; sensory neuropathy(?). Her thyroid functions were abnormal. The patients’ urine mercury level was 86.8 ug/L (reference value <10 ug/L). Since all the members of the family could have been exposed, urinary mercury levels of father, mother and the other children (8, 12, 14 years old) were measured and the values were; 162ug/L, 44.2ug/L, 198.89 g/L, 149.7 ug/L and 220.04 ug/L respectively. But they were all asymptomatic. All members of the family were hospitalized with a diagnosis of chronic mercury toxication. Chelation therapy with DMPS was started and continued for five months. The younger boy recovered neurologically at the end of the fifth month and he was discharged proposing annual check.

RESULT
Some important sources of mercury in houses are hand-made cosmetic products, fluorescent lamb and thermometer. People who are accidentally exposed to mercury may admit neurology, dermatology or immunology clinics with non specific symptoms. The children who are exposed to mercury should be examined more carefully and all individuals in the same environment should be examined in terms of exposure.

Keywords: Mercury, infant, chelation therapy