

- 204 Urinary Lead Excretion Following Treatment with Sodium Calcium Ethylenediaminetetraacetate. M. Salvini and U. Vidali. *Folia Med.* 38, 579-592 (1955). Italian.

In persons with lead poisoning and treated with disodium calcium EDTA, free lead appears immediately after cessation of treatment while the excretion of the lead chelate continues for some days. The excretion of lead chelate lasts in man and in the rabbit longer than the excretion of calcium chelate.

-- Chem. Abstr.

- 205 Manganese. Occ. Health Bull. (New Jersey State Dept. Health, Bur. of Adult and Occ. Health), 4, No. 3, 5 pp. (1955).

The uses and compounds of manganese are briefly discussed. Manganese poisoning is comparatively rare, but serious and even fatal poisonings have occurred, mostly from inhalation or swallowing of the dust or fumes of its compounds. Symptoms of poisoning usually are not present until after three months' exposure to heavy concentrations. Symptoms are described, mostly involving the nervous system. The incidence of pneumonia has been reported to be high in manganese workers. A medical control program is described. Directions are given for the determination of manganese in air. Seven suggestions are given for prophylaxis, including removal of the dust, approved respirators only when other measures are impractical, periodic testing of the air, and sanitary measures. The official threshold limit is 6 mg. per cu. m. for eight hours' daily exposure.

- 206 Ethylenediaminetetraacetic Acid in Manganese Poisoning of Rats. A Preliminary Study. Mary F. Kosai and A. J. Boyle. *Ind. Med. & Surg.* 25, 1-3 (Jan. 1956).

An experimental cage arrangement has been devised which satisfactorily eliminates contamination of urine by food and feces for manganese poisoning studies. Calcium EDTA when injected subcutaneously in rats given manganese previously increases markedly the manganese content of urine, but does not extract manganese from the intestinal contents. Manganese EDTA complex may be injected subcutaneously in rats without producing skin lesions. Approximately 64% of the manganese in the above form is excreted in the urine within 24 hours following subcutaneous injection. Evidence tends to show that subcutaneously injected calcium EDTA lowers the concentration of manganese in the liver and brain tissues of rats poisoned with this metal. Some evidence is presented which indicates that manganese is redistributed in liver and bone following cessation of subcutaneous calcium EDTA injection.

-- Cond. from authors' summary

- 207 Industrial Thallium Poisoning. J. Glomme and B. Sjostrom. *Svenska Lakartidn.* 52, 1436-1441 (June 3, 1955). Swedish with English summary.

Four cases of occupational thallium poisoning were investigated. The patients were engaged in the manufacture of rodenticides at four different workshops. Thallium sulfate was used in the dry state and in solution. The patients had been careless in handling the powder and did not suspect poisoning. Sensory changes in the distal parts of the limbs were accompanied by only minor and uncertain signs of polyneuritis. In only one case was alopecia definitely demonstrable. One patient's symptoms had varied from time to time with the degree of exposure to thallium over a period of four years. It should be comparatively easy to prevent thallium poisoning by taking simple precautions in handling. In Sweden thallium-containing rodenticides are made in small factories, and as the symptoms are general and non-specific, history taking by the physician will be helpful.

-- Cond. from Bull. Hyg.

- 208 Study of the Health of Workers Employed in Mining and Processing of Vanadium Ore. F. J. Vintinner and others. *Arch. Ind. Health* 12, 635-642 (Dec. 1955).

Environmental and medical studies were made of 78 workers engaged in the processing of vanadium-bearing ore and 37 workers who were employed by the same company in occupations where there was no exposure to vanadium from the various processing operations. Of the 78 workers exposed to vanadium, 39 workers were exposed to dust from the ore before roasting (inactive ore) in concentrations ranging from 0.004 to 2.116 mg. of vanadium per cubic meter of air, and 39 workers were exposed to vanadium after roasting (active ore) and