to the final product, vanadium pentoxide, in concentrations ranging from 0.018 to 58.82 mg. of vanadium per cubic meter of air. Evidence is presented showing an abnormally high prevalence of signs and symptoms indicative of irritation to the upper respiratory tract and to the eyes among workers exposed to vanadium-bearing dusts as compared with workers not exposed to such dust. No evidence was found to suggest that vanadium, in concentrations as found in this study, causes systemic poisoning, neurological abnormalities, cardiovascular condition, or pulmonary pathology, such as pneumonitis and reticulation.

-- Authors' summary

209 Residual Blood Nitrogen in Dioxane-Treated Rabbits. P. A. Rozenberg. Farmakol. i Toksikol. 18, No. 3, 45-50 (1955). Russian.

After ingesting dioxane once (dose 2.5 mg. per kg.), rabbits soon showed toxic effects on the central nervous system. After two to four days residual nitrogen rose rapidly to 300 mg. % or higher, while oliguria and anuria became evident. Unlike ethylene glycol, dioxane does not lower a previously high level of residual blood nitrogen. A few rabbits were exceptionally resistant to dioxane poisoning, surviving repeated and increasing doses.

-- Chem. Absts.

210 Several Cases of Poisoning with Commercial Ethylene Glycol. I. Morini. Minerva med. 1, 72-77 (1954). Italian.

There are three stages of poisoning by ethylene glycol: (1) a stage resembling ordinary drunkenness with ethyl alcohol; (2) a second period showing residual symptoms of drunkenness with the beginning of symptoms of oxalic acid poisoning; and (3) with the symptoms purely of oxalic acid poisoning. The greater the amount of glycol ingested, the closer are these stages run together. In fatal cases death was caused by renal block. There is no way of distinguishing the early stages of ethylene glycol poisoning from ordinary drunkenness. In the third stage there is loss of control of the sphincters, marked psychological disturbance with the patient alternating between depression and hyperactivity, and marked cyanosis.. The toxic dose is not greater than 100 g. per person. The fatal dose is very close to the toxic dose.

-- Chem. Absts.

211 Acute Methyl Alcohol Poisoning in 49 Naval Ratings. D. J. Tonning, D. W. Brooks, and C. M. Harlow. Can. Med. Assn. J. 74, 20-27 (Jan. 1956).

A series of 49 cases of acute methyl alcohol poisoning with recovery is reported (no demonstrable eye lesion after five months). Gastric lavage was not used in any case, because it is of questionable value when poisoning has occurred. Plasma extenders were found valuable in combating vascular failure. Frequent drainage of the cerebrospinal fluid does not appear essential. The occurrence of hypopotassemia during management was definitely established. This situation, a complication of therapy, can and should be prevented, or if established, corrected.

-- Authors' summary

212 Studies on the Toxicology of N-Nitrosodimethylamine Vapor. K. H. Jacobson, H. J. Wheelwright, Jr., J. H. Clem, and R. N. Shannon. Arch. Ind. Health 12, 617-622 (Dec. 1955).

Exposure of dogs, rats, and mice to nitrosodimethylamine vapor caused malaise, polydipsia, anorexia, ascites, liver damage, and bleeding. Clinical, laboratory, and pathologic observations of exposed dogs revealed elevated rectal temperatures, an immediate transient leucopenia, disruption of the blood coagulation mechanism with bleeding, and severe liver cell damage. This liver damage is most responsible in the production of a diseased state. Correlation of data from this report with a few reports of human morbidity on exposure to the compound reveals that this vapor is highly toxic. Adequate precautions should be taken to prevent human exposure.

-- Authors' summary

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