

- 213 Toxicity of Adipic Nitrile. 1. Acute Poisoning and Mechanism of Action. L. Ghiringhelli. Med. lavoro 46, 221-228 (1955). Italian.

Adipic nitrile poisoning is described in humans as deep asthenia, vertigo, vomiting, inability to stand, cyanosis of the skin, tachypnea, and tachycardia which disappear on administering sodium thiosulfate (15 cc. 25% solution) and glucose (20 cc. 40% solution). On administering 50 mg. adipic nitrile per kg. of weight of guinea pig, lethal toxicity is obtained owing to hydrolysis of adipic nitrile to hydrocyanic acid in the blood system. Sodium thiocyanate is found in the urine of surviving animals. Sodium thiosulfate (25% solution, 2.5 cc. per kg.) has greater effect against poisoning than sodium nitrite (25% solution, 2.5 cc. per kg.).

-- Chem. Absts.

- 214 Toxicity of Adipic Nitrile. 2. Study of Influence Exercised on Blood Constituents by Continuous Supply and Possibility of Absorption through the Skin. L. Ghiringhelli. Med. lavoro 46, 229-235 (1955). Italian.

Guinea pigs injected with aqueous solution of adipic nitrile in doses from 3 to 30 mg. per kg. were studied for blood constituents, concentration of thiocyanate in blood, and their elimination in urine. Blood constituents remain the same, blood thiocyanate is proportional to dose administered, and adipic nitrile is eliminated in urine as thiocyanate. Urine elimination of thiocyanate was measured in guinea pigs treated with aqueous and alcoholic solutions of adipic nitrile on depilated or worn skin. Its action is proportional to the dose applied on the skin and is independent of type and concentration of the solvent.

-- Chem. Absts.

- 215 Fatal Poisoning with Sodium Fluoracetate. Report of a Case. J. L. Brockmann, A. V. McDowell, and W. G. Leeds. J. Am. Med. Assn. 159, 1529-1532 (Dec. 17, 1955).

A case of poisoning by the rodenticide sodium fluoracetate is described. Certain drugs can be used in such cases: (1) procainamide (Pronestyl) hydrochloride for cardiac arrhythmias; (2) intravenously used alcohol for central nervous system irritability; and (3) vasodepressor drugs such as mephentermine (Wyamine) sulfate to maintain blood pressure. These drugs prolonged the life of the patient and may save lives in similar cases.

-- Cond. from authors' summary

- 216 Vestibular Disturbances in Methyl Chloride Poisonings. B. Chalupa, A. Karen, and M. Sevcik. Pracovní Lékarství 7, 278-281 (1955). Bohemian.

Out of 28 workers handling methyl chloride for 6.8 years on the average, 27.8% showed pathological changes of the labyrinth caused mostly by acute but also by chronic poisonings. The disturbances were more frequent in the summer than in the winter.

-- Chem. Absts.

- 217 Determination of Perchloroethylene in Fruit Treated with this Hydrocarbon. J. Deshusses and P. Desbaumes. Mitt. Lebensm. Hyg. 46, 233-237 (1955). German.

A method for the determination of perchloroethylene (tetrachloroethylene) in fruit is described. Perchloroethylene was removed by an air current, decomposed at a high temperature, and the resulting hydrochloric acid was titrated with mercurous nitrate. The retention of perchloroethylene fumes in grapes, tangerines, and dried fruit was examined; commercial fresh and dried fruit tested did not contain any volatile chlorinated hydrocarbons.

-- Chem. Absts.

- 218 Massive Necrosis of the Liver Due to Trichloroethylene. G. E. Joron, D. G. Cameron, and C. W. Halpenny. Can. Med. Assn. J. 73, 890, 891 (Dec. 1, 1955).

A case of massive necrosis of the liver following industrial exposure to trichloroethylene is presented. Attention is drawn to the fact that trichloroethylene may cause liver damage, notwithstanding the generally accepted view that it is non-toxic to the liver.

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