FILE NAME: Chemical Abstracts (CHAB)

DATE: 1934

DOC#: CHAB010

DOCUMENT DESCRIPTION: Abstract Originally Published in 1934 by Stuber

during the process of burning. Arsenic has been dete d in many specimens of urine; it is suggested that chronic As poisoning is of common occurrence. W. H. A.

Encephalic lesions due to intravenous injections of sodium chloride. Camillo Colombi and Ulrico Sacchi. *Arch. ist. biochem. ital.* **6**, 135–46(1934).—When a strong concn. of NaCl (20–30%) or a dose of 1 g. NaCl per kg. of dog is injected intravenously, it may produce lesions accompanied by degeneration and necrosis. If death is produced in the animals immediately after the injection, vascular modifications of a hemodynamic type can be observed. E. S. G. Barron

Effect of prolonged administration of acid extract of anterior pituitary on the thyroid gland of guinea pigs. E. F. Scowen and A. W. Spence. *Brit. Med. J.* **1934**, II, 805–7.—Prolonged administration of an acid ext. of pituitary in guinea pigs caused thyroid hyperplasia, exophthalmos and suprarenal enlargement. J. B. Brown

Clinical spectroscopy. A study of biopsy material taken from patients receiving gold sodium thiosulfate. L. Edward Gaul and A. H. Staud. *Arch. Dermatol. Syphilol.* 28, 790–4(1934).—Au is not a constituent of normal skin. The amt. of Au in the skin is proportional to the total dosage. The deposit of Au in the cutis is uniformly distributed and appears to be permanent. A patient who has received a total dosage of 0.1 g. will give a pos. test for Au. B. C. Brunstetter

Iodobismitol: clinical excretion of bismuth. P. J. Hanzlik, H. G. Mehrtens and J. B. Spaulding. *Arch. Dermatol. Syphilol.* 29, 298–306(1934); cf. *C. A.* 28, 5881⁴.—Bi excretion in urine and feces following intramuscular injections of iodobismitol was studied in human beings and rabbits. In both organisms the excretion was characterized by promptness of onset, considerable daily irregularity, long duration and incompleteness. Regardless of dosage the total urinary excretion of Bi was 30–87% (medium, 40%) for patients and 37–62% (median, 44%) for rabbits; the total fecal excretion of Bi was 2–8% (median, 3.3%) for patients and 1.1–13% (median, 4%) for rabbits. The remainder or roughly one-half the amt. of Bi injected continued to be excreted in traces in the urine for long periods, probably weeks. B. C. B.

The question of bismuth penetration of the nervous system. Report of clinical and laboratory study. Joseph V. Klauder and Herman Brown. *Arch. Dermatol. Syphilol.* 29, 351–5(1934).—Data are presented which confirm the results of previous investigators that "Bi has rarely been found in the spinal fluid of patients into whom a Bi compd. has been injected and only occasional traces have been found in the brains of lab. animals into which massive doses of Bi compds. have been injected." The authors believe that the absence of cerebral penetration by Bi supports the idea that the Bi of Na iodobismuthite like that of all other Bi compds. is changed in the body to a stable salt and is excreted as such. B. C. Brunstetter

The cellular response of lymph nodes to various dust suspensions introduced into lymphatics. Katharina Stüber. *J. Ind. Hyg.* **16**, 282–95(1934).—Distd. water suspensions of silica, granite, rhodenite, talc, asbestos, limestone, CdS, MnO_2, rouge and cornstarch were injected into the lymphatic that accompanies the external saphenous and cephalic veins, resp. The lymph-node injection method may be developed into a rapid means of detg. the toxicity of certain dusts. The silica-contg. cells lost their phagocytic power toward other particulate matter to a considerable degree and are identified biologically as modified endothelial lymph phagocytes. A. L. E.

The cellular response of lymph nodes to suspensions of crystalline silica and to two varieties of sericite introduced through lymphatics. Cecil K. Drinker, Madeleine E. Field and Philip Drinker. *J. Ind. Hyg.* **16**, 296–9 (1934).—Certain of the lymph nodes of 2 dogs were injected with 2 types of sericite, and with cryst. silica for control. After 10 and 12 days, the dogs were killed and the nodes contg. sericite showed changes similar to those which had received silica. It may thus be inferred that dusts contg. either of these sericites will upon inhalation react as does cryst. silica. A. L. Elder

Physiological action of vicioside (vicin). H. Hérissey and J. Cheymol. *Bull. soc. chim. biol.* **16**, 1176–81(1934); cf. *C. A.* **25**, 5170.—Vicioside in doses of less than 1 g./kg. had no toxic action when injected intravenously in mice and dogs. Most of it was excreted in the urine. L. E. Gilson

Influence of some alkaloids of the isoquinoline group (hydrastine, narcotine, laudanosine) on the vasomotor reflexes of the carotid sinus. Fernand Mercier and Jean Delphaut *Compt. rend. soc. biol.* **117**, 15–16(1934); cf. *C. A.* 28, 6481⁶. L. E. Gilson

Action of bile salts on the central nervous system. O. Coquelet. *Compt. rend. soc. biol.* **117**, 114–17(1934).—**Action of bile salts on the peripheral nerves.** *Ibid.* 118–20. L. E. Gilson

Agranulocytic angina following ingestion of dinitrophenol. S. Stephen Bohn. *J. Am. Med. Assoc.* **103**, 249–51(1934).—Ingestion of 21.8 g. of 2,4-dinitrophenol (*Nitraphen*) over a period of 4 months caused severe illness. F. P. Griffiths

Gasoline and kerosene poisoning in children. John A. Nunn and Frank M. Martin. *J. Am. Med. Assoc.* 103, 472–4(1934).—When inhalation occurs the case is more serious than ingestion. Treatment consists of gastric lavage or emesis and laxatives. To stimulate respiration the use of 95% O_2 and 5% CO_2 mixt. is of benefit. F. P. Griffiths

Dilaudid (dihydromorphine hydrochloride) and morphine effects on basal metabolism and body functions. Norman A. David. *J. Am. Med. Assoc.* **103**, 474–8 (1934).—Dilaudid acted more rapidly but over a shorter period than morphine. It appears to be about 10 times as active and the subcutaneous dose of 2 mg. equals 16 mg. of morphine. Slightly less respiratory depression results from dilaudid but itching is increased. F. P. G.

Cortical hormone and insulin. Nicoletta Sabatucci. *Boll. soc. ital. biol. sper.* **9**, 655–6(1934).—In 4 rabbits the administration of cortical hormone had no effect on glucemia or the action of insulin. Helen Lee Gruehl

Metabolism of oxalic acid. IX. Oxaluria in hepatic disturbances. P. De Lucia and N. Fucci. *Boll. soc. ital. biol. sper.* **9**, 678–81(1934); cf. *C. A.* **24**, 5804.—In 20 of 24 cases there was an increased daily elimination of oxalic acid (24–33 mg.). Helen Lee Gruehl

Pharmacological studies on Digitalis lanata EhRH. A. Rabbeno and O. Marini. *Boll. soc. ital. biol. sper.* 9, 748–50(1934). Helen Lee Gruehl

Therapeutic action of iron, amino acids and pyrroles on anemia. Hans Reichel. *Minerva med.* **1934**, II, 358–62.—"Aminoferrina" (5% amino acids and pyrrole in 1% ferrous carbonate soln.) showed a good therapeutic action in various types of anemia. Helen Lee Gruehl

The therapeutic value of the new germicide, bismuth violet: a preliminary report. G. Raymond Kitchen and Frank E. Kitchen. *North Am. Veterinarian* **15**, No. 6, 12–16(1934).—Bi violet is lethal to Gram-pos. organisms in dilns. as high as 1 part per billion and is highly effective in the treatment of metritis and mastitis in cows. K. D. Jacob

Recent investigations into the toxicity of known and unknown poisonous plants in the Union of South Africa. Douw G. Steyn. *Onderstepoort J. Vet. Sci.* **3**, 125–30 (1934); cf. *C. A.* 28, 2790⁵.—The symptoms and post-mortem appearances caused by 3 plants, which have not previously been proved poisonous, are described. These plants are *Epaltes alata* Steetz., *Homeria pura* N. E. Br. and *Albuca* sp. Inconclusive results were obtained with *Zygophyllum foetidum* Schrag. The poisonous principle of gifblaar (*Dichapetalum cymosum*) was not affected by contact with dil. AcOH for 24 hrs. K. D. Jacob

The constitution of plant heart poisons. R. Tschesche. *Angew. Chem.* **47**, 729–32(1934).—The poisonous action of plant and animal heart poisons is due to the genins, as neither sugar nor suberylargenin is toxic. Sugar plays an important part, however, as it increases the resorption and soly. of the genin. The genins themselves are not very sol. in water. The free genins generally do not exert any influence upon the heart or only a very limited one. They