

The negative results obtained in the above series of experiments are reported because in the clinical literature on solitary bone cysts, trauma causing profound vascular disturbance, is repeatedly emphasized as an important etiologic factor.

Healing of sterile infarcted areas in the long bones of dogs does not result in lesions resembling solitary bone cysts in man. However, fibrosis of the marrow with multiple small cystic cavities lined by condensed fibrous tissue may develop.

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Is Sodium Salicylate Excreted in the Bile?*

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In the course of studies on the excretion of various chemicals by the liver, it was discovered that sodium salicylate and the sodium salt of diiodosalicylic acid did not appear in the bile of the rabbit in determinable quantities after the intravenous administration of 4 cc. of a 1% solution per kilo of body weight.¹ In view of the consequent discrepancy regarding the cholagogue and bactericidal action of salicylates on the biliary system, it seemed worth while to investigate the biliary excretion of salicylate in man. Three patients, 2 with drainage tubes in the common hepatic duct following cholecystectomy and choledochotomy, and one with a cholecystostomy, received by mouth a single dose of 20 mgm. of sodium salicylate per kilo of body weight. Samples of bile and urine were obtained before administration and after administration, namely 12, 40 and 79 hours respectively. The salicylate was determined colorimetrically by a modification of the Millon reaction.²

Studies made in one case: Housewife of 66, cholecystectomy for chronic cholecystitis and cholelithiasis, choledochotomy for stones in the common duct, and catheter in the common duct. The bile and urine were collected in hourly samples for 12 hours. The flow of bile averaged about 26 cc. per hour (with a minimum of 8 and a

* This work has been conducted under the joint auspices of the Otho S. A. Sprague Memorial Institute and the Douglas Smith Foundation for Medical Research.

¹ Halpert, Béla, and Hanke, Milton T., *Anat. Rec.*, 1929, xlii, 49.

² Folin, O., and Ciocalteu, V., *J. Biol. Chem.*, 1927, lxxiii, 627. Hanke, M. T., *J. Biol. Chem.*, 1928, lxxix, 587.

maximum of 48 cc.) and totaled 290 cc. for the 12 hours. Sodium salicylate could not be detected. The urine totaled 1381 cc. for the same period. This contained a total of 0.584 gm. of salicylic acid, corresponding to 0.680 gm. of sodium salicylate.

Sodium salicylate did not appear in the bile in recognizable amounts following the oral administration of doses of 20 mg. per kilo of body weight to the 3 patients with disease of the biliary system. These observations are in accord with data obtained in healthy rabbits.¹ The principal route for the elimination of sodium salicylate according to the above observations is the urinary tract. It is, therefore, reasonable to assume that whatever beneficial effect may follow the administration of this drug to patients with disease of the biliary system, is not due to the presence of salicylate in the bile.

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Further Observations on the Oxygen Consumption of Nerve.*

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The earlier studies of Fenn¹ and Gerard² on the oxygen consumption of frog nerve were not in complete quantitative agreement, even when differences in the experimental temperatures were allowed for. Fenn used American frogs (*pipiens*?) and a volumetric method, I used European species and a manometric technique, so it was desirable to ascertain whether the divergent results depended on material or methods. It also seemed useful to examine in more detail than previously the influence of various conditions on the rate of oxygen usage of nerve and to compare nerves of several animals. Observations carried on during 2 years by the Warburg technique are here summarized.

The Q_{O_2} (cmm. O_2 consumed per gm. of moist nerve per hour) of the sciatic of the American green frog, mainly *R. pipiens*, is lowest in December and January, $Q_{O_2} = 37$, and highest in June or a little earlier, $Q_{O_2} = 60+$. The Q_{O_2} shows a temperature coefficient of 2.2, as far as can be judged by experiments run at 18° to

* The present investigation was aided by a grant to the University of Chicago from the Rockefeller Foundation.

¹ Fenn, *J. Gen. Physiol.*, 1927, x, 767.

² Gerard, *Am. J. Physiol.*, 1927, lxxxii, 381.