

Average duration of life, 70.3 hours. Observation: The severity of the toxæmia of duodenal obstruction is greatly diminished when the pancreas is excised. Autopsy revealed a slight congestion of the mucosa of the duodenum and terminal colon.

Note: A severe toxæmia occurred in two cases; the result of general peritonitis in the one and partial devitalization of the duodenum in the other. These variables were not included in estimating the mean duration of life.

Group IV: Duodenal occlusion, pancreatic excision, pancreatic transplant (auto), number of dogs, 4.

Average duration of life, 29.7 hours. Observation: A severe toxæmia developed within a few hours, the result of devitalized tissue produced by the digestion of the bed of the pancreatic transplant. Autopsy revealed congestion of the peritoneum duodenal and colon mucosa from a slight to a moderate degree.

Group V: Ileal segmental exclusion; bilateral occlusion; reconstruction of intestinal canal; pancreatic tissue (homo) placed within isolated segment^{1 2}; number of dogs, 6.

Average duration of life, 35.7 hours. Observations: A severe fulminating toxæmia developed within 18 hours. Autopsy revealed a devitalized segment. A rupture of the segment was found in three animals with resulting fat necrosis and peritonitis.

Note: In one animal the segment remained viable. The resulting toxæmia stimulated duodenal occlusion. The duration of life was 72 hours. This variable was not included in estimating the mean duration of life.

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A new method of testing liver function with phenoltetrachlorophthalein. III. Clinical report.

By SANFORD M. ROSENTHAL (by invitation).

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The author's method consists of determining the rate of disappearance from the blood stream of phenoltetrachlorophthalein,

after the intravenous injection of 5 mg. per kilo. A simplified method of determining the amount of dye in the plasma has been devised: a series of standards for comparison is prepared by adding varying amounts of the dye to plasma prior to the injection.

The test was performed upon ten normal individuals and ten control cases of extra hepatic disease. Seventeen cases of liver disease of various types were tested and results fully bore out experimental findings; striking degrees of retention of the dye in the blood were present where known damage to the liver existed. Results are quantitative, they have harmonized with the clinical evidence of the extent of liver damage and it is believed that they give an index of the functional capacity of the entire liver.

43 (2003)

The effect of sunlight upon the concentration of calcium and of inorganic phosphorus of the serum of rachitic children.

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Recent studies have shown that the bone lesions of rickets may be healed by a variety of measures (administration of a proper diet, or of cod liver oil, radiation with mercury vapor quartz lamp, carbon arc lamp, cadmium open spark, etc.) Hess and Unger¹ claim to have obtained a similar result by exposing children suffering with rickets to direct sunlight.

Howland and Kramer² have demonstrated that with active rickets, unassociated with tetany, there occurs regularly a marked reduction of the concentration of inorganic phosphorus in the serum. In some instances there was also a moderate reduction of the calcium concentration. With active rickets the reduction is such that when the concentration of calcium expressed in mg. per 100 c.c. of serum is multiplied by that of inorganic phosphorus similarly expressed, the product does not

¹ Hess, A. F., and Unger, L. J., *Journal of A. M. A.*, 1921, lxxvii, 39.

² Howland, John and Kramer, Benjamin, *Transactions of the American Pediatric Society*, 1922, xxxiv, 204.