

greatly increased by an oral intestinal obstruction; but he thinks it fairly established that a toxemia developing from a disturbance of the duct-bearing portion of the duodenum contains poisons of an exceedingly grave nature. Without suggesting that trypsin alone is responsible for this physiologic death, he mentions it as one of a class occurring in the duct-bearing portion of the duodenum, the antibodies to which have been definitely found. The hypothesis offered in this paper is that duodenal secretions of either intra-enteric or extra-enteric origin, were, in their disturbed function, responsible for the death following duodeno-jejunal obstruction. Some such hypothesis is needed to explain the singular syndrome of symptoms, as well as the singular protective power of the first thirty-five centimetres of the intestine, the presence of which in the oral loop suffices to prevent death before the opening of the stoma control. Two therapeutic considerations are offered. One is, that the lesion is an enteric one, and the source of the toxemia is in the duodenum. The second is, that the blood must be filled with the toxic products whatever they are, and that the modern method of bleeding followed by transfusion from a healthy individual is indicated. He also suggests a third, namely, that a protective serum may possibly be developed from the long loop dogs, i.e., when the obstruction is lower than the duodenum in the intestine. The paper concludes with several references to other investigations, which may be taken as supporting or favorable to the hypothesis here offered.

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THE THERAPEUTIC UTILIZATION OF BILIARY FISTULAS.—L. L. McArthur, Chicago (*Journal A. M. A.*, January 1), having noticed the loss of water in irrigating biliary fistulas, conceived the idea of studying the effects of various fluids introduced through this route into the duodenum. First, as a means of deluging the system with water, he found that a temporary fistula may often be utilized with surprisingly good effects. He has repeatedly injected in such cases, by continuous irrigation of a warm salt solution up to 3,000 c.c. of fluid as a means of flushing out the kidneys, clearing up a jaundice or filling up the blood vessels, and in one case, even added dextrose as supplying the food calories most readily assimilable. He is not recommending a cholecystotomy as a therapeutic measure for other ailments than those for which it was originally designed, but simply the utilization of already existing fistulas for indications similar to those mentioned.