

*Comments.* The use of solid food at the earliest opportunity occurred to me because of a former experience with a case where the gall bladder had been emptied of a number of stones and one had been removed by incising the first part of the common duct. The sinus remained open for about six weeks. I noticed that there was little bile on the dressing in the evening but a great deal in the morning. The patient was given a small meal of ordinary solid food every four hours night and day and the wound healed completely in four days. My partner, Dr. R. Mills Simpson, recently found equally satisfactory results follow four-hourly feeding in a case where the sinus healed slowly. In such cases it is needless to say that the continued discharge of bile could not be due to an undiscovered stone in the common duct, in which case this procedure would, it is quite clear, be useless. But in the absence of such common-duct obstruction, this improvement is quite in keeping with the known physiology of the parts.

The discharge of bile from the bile-duct into the duodenum is regulated by the passage of the acid contents of the stomach over the orifice of the biliary duct. Foster (5) points this out and adds: "Indeed, stimulation of this region of the duodenum with a dilute acid at once calls forth a flow, although alkaline fluids so applied have little or no effect." Cannon (6) has shown that, in the passage of food from the stomach, the maximum is reached in the case of carbo-hydrates in two hours, fats in three hours and proteids in four hours. Thus it is seen that with an ordinary mixed diet the maximum will be somewhere about the fourth hour and by giving a small meal every four hours the bile will not be allowed to be stored in the gall bladder at any time, nor will the orifice of the duct be closed for long at one time. Therefore, it is natural to suppose that four-hourly feeding would be most favorable to the rapid rushing forward of the bile and the early closing of a bile fistula in the absence of complete obstruction.

In this case, at no stage of the operation was the finger inserted into the foramen of Winslow to hold the structures forward, though this is recommended by McBurney in a private