ABSTRACT

The anatomy of the pancreatico-biliary duct system in Jamaicans was investigated with the following results:

1. The incidence of the different patterns of union of the cystic and common hepatic ducts showed marked differences from data derived from other populations.

2. The cystic and common hepatic ducts may have a common wall.

3. The incidence and course of aberrant bile ducts correspond to those in the literature.

4. The upper limit of normality of the flattened width of the common bile duct is suggested to be 11 mm.

5. The presence or absence of smooth muscle tissue in the common bile duct wall is discussed in relation to: (a) the role of the duct as a passageway of bile, (b) problems encountered when grafting, and (c) causation of biliary pain.

6. In 8.1% of cases it was difficult to expose the pancreatic part of the common bile duct because it was surrounded by pancreatic tissue.

7. In 9.4% of specimens the pancreatic part of the common bile duct coursed for the whole or part of its length alongside the medial wall of the duodenum without pancreatic tissue intervening between them.

8. In 19.3% of cases the duct of Santorini was as big as or bigger than the duct of Wirsung, a higher incidence than that reported elsewhere.

9. It appeared that no real sphincter exists at the duodenal end of the duct of Santorini.

10. The incidence of a common channel / ampulla (44.4%) was low if compared with the data in the literature.

11. The mucosal folds in the intramural parts of the common bile duct and the duct of Wirsung might play a significant role in the prevention of duodenal reflux and the regulation of the flow of bile and pancreatic secretion into the duodenum.

12. The variability in the component parts of the sphincter of Oddi was investigated. A sphincter choledochus was present in all cases, a common hepatopancreatic sphincter (= sphincter "ampullae") was found in 45.9% of cases, but a clearly-defined sphincter pancreaticus was not observed.

13. It is postulated that the presence or absence of a common hepatopancreatic sphincter may be one of the important factors in determining the patency or non-patency of the duct of Santorini at the papilla minor.

The clinical and functional implications of these findings are discussed.