

is congested or otherwise swollen; whereas if it passes through the gland, any congestion or swelling of the pancreas will, by pressing on the common bile duct, bring on jaundice, with its various sequelæ. Thus is explained, to my mind, many of the cases of so-called catarrhal jaundice, which may come on as an extension from gastro-duodenal catarrh, or in the course of a pneumonia, or during typhoid fever, influenza and other ailments, and which I believe to be often dependent on catarrhal inflammation of the pancreas, leading to pressure on the bile ducts. In some cases I have proved this hypothesis to be correct at operations undertaken for chronic jaundice.

As the duct is completely embraced by the pancreas in 62 per cent. of all cases, we may conclude that in nearly two-thirds a swelling of the head of the pancreas will produce jaundice; and curiously, this percentage coincides with Dr. Cumming's and my clinical observations and pathological investigations on the urine of pancreatic cases.

Not only so, but when the head of the pancreas embraces the common bile duct, should a gall-stone pass down, it will almost certainly exercise pressure on the gland, and thus directly interfere with its function and with the discharge of its secretion.

The fourth portion is where the duct enters the wall of the second part of the duodenum and ends in the ampulla of Vater, into which small cavity the duct of Wirsung also debouches. This part of the common duct comprises all that portion of the canal contained in the thickness of the wall of the duodenum. It passes obliquely through the muscular coat of the intestine, and then dilates into a little reservoir underneath the mucous membrane, into which the main pancreatic duct also opens. This is known as the ampulla of Vater. This ampulla, a little oval cavity, may be well seen in a section of the wall of the duodenum, in the axis of the common duct. The opening of the common duct is above that of the pancreatic duct, and the two are separated by a little transverse fold of mucous membrane. The ampulla measures from six to seven millimetres in length, and from four to five in breadth, and with the termination of the two ducts, is surrounded by a thin layer of unstriated muscular tissue, forming a sphincter (Oddi).

The ampulla opens into the duodenum by a little round or elliptical orifice, which is the narrowest part of the bile channel. It is important to note that the length of the diverticulum of Vater may vary from zero to 11 millimetres, the average being 3.9 millimetres, according to Opie, who measured one hundred specimens. Viewed from the interior of the duodenum the