

would give rise to such a jaundice as this. There is unquestionably an obstruction in the bile-ducts which prevents the free flow of bile into the intestinal canal.

This obstruction may be produced, 1st, by a gall-stone, and pain is one of the prominent, if not the most prominent symptom by which we recognize the presence of this obstruction. The pain in jaundice produced from an obstruction caused by the presence of a gall-stone in the bile-ducts, precedes the jaundice usually twenty-four or thirty-six hours. This pain is somewhat peculiar; it originates in the epigastrium, usually in the immediate region of the bile-ducts, and strikes directly through to the back.

To determine the situation of the bile-ducts draw a line from the right nipple to the umbilicus, and the point where this line crosses the free border of the ribs will indicate it very nearly.

This man has had no pain since his sickness began, and it is altogether probable, therefore, that the jaundice is not dependent upon an obstruction produced by a gall-stone.

Another cause which will produce obstruction of the bile-ducts is an acute catarrhal inflammation. This acute inflammation of the mucus membrane lining the bile-ducts is not primary, but is usually propagated from an inflammation in the duodenum. Again, inflammation of the duodenum does not usually occur as a primary inflammation, but is almost always associated with gastric catarrh as the primary disease.

In acute gastric catarrh, vomiting is almost always present, although in many cases it may not be very severe; but you may expect vomiting, some pain, and a burning sensation at the epigastrium. (The patient was then placed upon the table, and prepared for physical examination.) As pressure is made in the epigastric region, there is manifestly considerable tenderness, yet the patient gives us no history of vomiting. Vomiting, however, we would not regard as absolutely essential to determine the existence of acute gastric catarrh, inasmuch as it may not be present, although it almost always is. In very mild cases there may be simply a loss of appetite to indicate the existence of gastric disturbance.

The first thing which this man noticed was a loss of appetite and nausea, and now he has great tenderness over the region of the bile-ducts and epigastrium, and these alone are sufficient to indicate some gastric inflammation. The obstruction of the bile-ducts, in these cases of acute catarrh, comes from the tumefaction or thickening of the mucous membrane, and more or less from the accompanying secretion.

This inflammation may only involve the hepatic duct, and ductus communis, or it may extend far up into the ducts. As a general rule the catarrhal inflammation extends up quite a distance towards the lobules of the liver. When this inflammatory process has produced sufficient thickening of the mucous membrane to obstruct the ducts, the bile is retained and reabsorbed, giving rise to the jaundiced hue of the skin.

There will usually be some fever present in these cases, generally of a simple ephemeral character, if dependent upon the jaundice alone.

The two principal causes of acute jaundice have been named; obstruction from gall-stones, and an obstruction which occurs in connection with acute catarrh of the bile-ducts.

Jaundice may occur under a variety of circumstances. It may occur from intense congestion of the liver. Sometimes in malarial fevers the congestion is sufficient to cause acute jaundice, but the cases are rare. It may occur from pressure on the bile-ducts produced in a variety of ways, and from a variety of causes. There may be the development of a tumour in the transverse fissure of the liver, which by its mechanical pressure obstructs the bile-ducts, and in this way gives rise to jaundice. In such a case, however, the appearance and extent of the jaundice would be influenced by the growth of the tumor, and it would as a rule be developed slowly. Almost all cases of acute jaundice are due to one of the two causes first named.

In most cases of acute jaundice we have a slight enlargement of the liver, which is due to distention of the ducts with bile. As we make percussion upon this patient it is seen that the liver is enlarged in all directions. In the median line, the line of hepatic dulness extends fully four inches from above downwards.

This is an ordinary occurrence in jaundice, and usually we also get more or less tenderness over the hepatic region, as you see in this case, the patient shrinking when percussion is made. We have in jaundice not only a turning back of the bile, but there is more or less hyperæmia, which may account for the tenderness.

The question is asked, Might not abscess of the liver give rise to acute jaundice? It might, and the first question you would ask, if your suspicion turned in the direction of abscess, would be, Has the patient ever had dysentery? The reason for asking that question is, that dysentery is the most common cause of abscess in the liver, or rather abscess of the liver most frequently occurs with dysentery. It is believed by some that it produces abscess of the liver by embolism, but I am not quite sure about that.

Abscess is very frequently associated with dysentery, but how they are connected with each other I do not know. What the connection is, is not exactly clear. It may be due to embolism, but I am certain that it is not in the great majority of cases, because the embolus cannot be found at the post-mortems, which it should be, if productive of such grave results.

It is simply a clinical fact, and I have never seen a case where the plugging up of the artery has been found.

Abscess would be excluded in this case because the man has had no dysentery, and has no history, which would lead us to suspect the presence of pus in any part of the body. His history is too short for abscess, which, as a rule, has a long history. There is no hectic fever, his pulse is 70, and his