

of the liver are valuable diagnostic points in favor of carcinoma.

Ascites is also an important symptom, and begins early; the involvement of the main trunk of the portal vein in the growth leads to obstruction in the mesenteric veins, and hence ascites is usually marked. This serves to a certain extent to distinguish carcinoma from hepatitis, from obstruction in which latter case there is little or no ascites, although the intestines may become greatly distended by gas, and gas being also in the peritoneal cavity might, to a careless observer, present a condition very similar to ascites. Ascites, whilst of value in helping one to come to a diagnosis is not of unmixed value inasmuch as the fluid in the abdomen sometimes renders palpation and percussion of the liver difficult, and so many are the conditions of the liver which produce it that in cases of carcinoma it is not wise to lay too much value upon it. Hæmatemesis from obstruction of the gastric vein is less frequently seen in carcinoma than in cirrhosis, and is usually a later symptom. Soon the patient becomes markedly emaciated, and with the extension of the growth to the peritoneal surface of the liver or into the peritoneum lining the abdominal wall, the pain becomes the severe and most distressing symptom, revealing very plainly at a later stage the nature of the disease.

Softening and suppuration of a carcinomatous mass, producing hectic symptoms, is occasionally seen, and such have been tapped, when the grumous bloody fluid which escapes shows but too clearly that the case is one of carcinoma.

II. *Enlargement of the liver associated with obstruction, or catarrh of the bile ducts.*—In these cases the liver is the subject of attacks of temporary engorgement which are attended by hepatic tenderness, slight peri-hepatitis, and jaundice often severe and oft-recurring, so that it may be said to be all but continuous. Here there is enlargement of the entire organ, the bile ducts are distended, the larger of which form sac-like dilations, containing bile which may be seen throughout the liver. I remember in one case where a post-mortem examination of the liver substance showed numerous deposits of the size of a sixpence, and filled with caseous matter, and in some a few drops of pus were to be seen, giving to the whole liver the appearance of its having

been affected with multiple abscesses from obstruction of the bile ducts, and which abscesses had undergone caseous degeneration; such cases so far as they have been verified by post-mortem examination are undoubtedly rare, but I am of the opinion that in a less advanced state they are comparatively common. Such cases are, of course, entirely distinct from "biliary," "hypertrophic," or "monolobular" cirrhosis, in which latter condition hypertrophy of the bile ducts and increase in their number constitutes the chief pathological change, and such occurs apart from any obstruction to the egress of bile; on the other hand enlargement from obstruction has its most common cause in gall-stones, or catarrh of the bile ducts from continued over-engorgement, and from syphilitic disease; such cases occur in patients past thirty-five years of age, they are attended with jaundice, show a history of attacks of hepatic cholic; the abdomen is distended and tympanitic in character; there have been attacks of severe pain referable to the region of the liver (peri-hepatitis), with severe constipation. On palpation the liver may be found considerably enlarged and its surface smooth, the gall bladder distended and tender to pressure. The diagnosis of this condition can rarely be made with certainty; it can be distinguished from carcinoma by its smooth surface, by the absence of ascites, and the even manner of the progress of the hepatic enlargement, and attacks of hepatic colic; there is gradual progression, the patient getting constantly weaker, the liver constantly enlarging without at any time presenting a distinct tumour, death occurring from inanition. From amyloid disease it can be distinguished by the painless nature of the latter, by the absence of the common cause of amyloid disease, viz., prolonged suppurative discharge, and by the rapid and enormous amount of enlargement which is so remarkable a feature in the amyloid change. From fatty disease of the liver it is easily differentiated; rarely does a fatty liver extend below the umbilicus, and in fatty livers attacks of pain are not usual.

III. *Common Cirrhosis.*—This is in the main one of the simplest affections to diagnose, occasionally however it presents peculiarities in its course and development which are very misleading, one of which is enlargement. Theoretically and pathologically it is true that enlargement precedes