

- ♦ Hepatic mass (hepatoma, secondary, liver abscess, hydatid cyst).
- ♦ Carcinoma of transverse colon.
- ♦ Gallbladder mass such as carcinoma.
- ♦ Mucocele or empyema of gallbladder.
- ♦ Pseudocyst of pancreas
- ♦ Epigastric hernia.

Q. What are the *causes* of carcinoma head of pancreas?

Ans. Actual causes are unknown. Some factors are responsible:

- ♦ Age: Above 70 years.
- ♦ Male: Predominant (twice more than female).
- ♦ Chronic pancreatitis.
- ♦ Excessive use of alcohol, coffee, aspirin.
- ♦ Smoking.
- ♦ Environmental factors, such as petroleum product and naphthylamine.
- ♦ Genetic in 5-10% cases. There may be hereditary pancreatitis, multiple endocrine neoplasia (MEN) and hereditary nonpolyposis colon cancer (HNPCC).

Q. What are the *types* of carcinoma of pancreas and what are the *sites*?

Ans. Usually adenocarcinoma (90%), which arises from epithelium of pancreatic duct. Sites are as follows:

- ♦ 60% in head.
- ♦ 25% in body.
- ♦ 15% in tail.

Q. What are the *presentations* of carcinoma of pancreas?

Ans. The presentations of carcinoma of pancreas are:

- ♦ Painless obstructive jaundice, with palpable gallbladder: Due to carcinoma of head of pancreas.
- ♦ Carcinoma involving the body and tail: Usually presents with pain in the epigastrium, deep seated, dull aching, radiates to the back, more on lying flat, feels better with bending forward (pain is due to involvement of celiac plexus).
- ♦ Loss of weight, anorexia, nausea.
- ♦ Mass in upper abdomen (in 20% cases).
- ♦ Others: Diabetes mellitus, acute pancreatitis.
- ♦ Rare features are: Thrombophlebitis migrans (arm vein is more involved than leg vein), venous thrombosis, portal hypertension and marantic endocarditis.
- ♦ Features of metastasis (hepatomegaly).

Q. What is *Courvoisier's law*?

Ans. In a jaundiced patient with palpable, nontender gallbladder, the cause is unlikely to be gallstones, rather it is due to carcinoma of head of the pancreas, cholangiocarcinoma, carcinoma of ampulla of Vater and extrinsic pressure in bile duct.

Reverse of the law is:

- ♦ Obstructive jaundice without palpable gallbladder is unlikely to be carcinoma head of pancreas and extrinsic pressure in common bile duct.