9
Extrahepatic Bile Duct Carcinoma

1. GROSS DESCRIPTION

Specimen

— extrahepatic bile duct cancer presents with obstructive jaundice and investigation includes serum CA19-9 levels, liver function tests, ultrasound scan and cholangiography (either MR, percutaneous or at ERCP) to detect large duct obstruction and strictures, and CT/MRI scan for tumour staging.
— cytological brushings and washings/biopsy/resection.

Cytology material is obtained at ERCP, which is used either for diagnostic or therapeutic purposes (stone retrieval, stent insertion). Diagnostic yields for malignancy are at best 30–40% and a presumptive working diagnosis may have to be based on clinical grounds. Radical resection is usually for a distal bile duct or ampullary mass (Whipple's pancreaticoduodenectomy) causing obstructive jaundice, which may or may not have been proven by ERCP brushings or endoscopic biopsy of the ampulla or duodenal papilla. Sometimes a segmental resection for a mid bile duct tumour is carried out, or occasionally combined with hepatic segmental resection for a proximal or infrahilar tumour.

— weight (g) and size/length (cm), number of fragments.

Tumour

Site

— tumours of the extrahepatic ducts are outside the liver and above the level of the ampulla of Vater. Cystic duct and choledochal cyst tumours are included.
— hilum/proximal third (50–60%: equally between the right/left/common hepatic, cystic and upper common bile ducts), intermediate third (25%), distal third (10%), multifocal/diffuse (15%).

Size

— length × width × depth (cm) or maximum dimension (cm).
— localized (a majority), the entire common bile duct or multifocal throughout the extrahepatic biliary system.

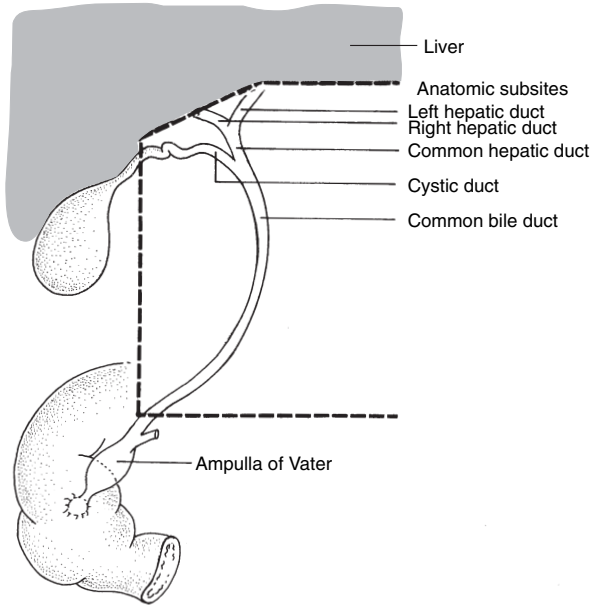

FIGURE 9.1. Extrahepatic bile ducts.

Appearance
— papillary/polypoid: distal third.
— nodular: intermediate third.
— ulcerated/sclerotic/scirrhous: proximal third.

The majority are nodular or sclerosing with deep penetration of the wall, a small minority have a cystic component.

Edge
— circumscribed/irregular.

2. HISTOLOGICAL TYPE

Adenocarcinoma
— tubular/acinar: usual type and a well to moderately differentiated biliary pattern of low cuboidal to tall columnar cells.
— papillary: polypoid and well differentiated in the distal third with a better prognosis.
— intestinal: well to moderate differentiation ± mucin secretion in a fibrous stroma.
— sclerosing: hilar (Klatskin) tumour. Well to moderately differentiated tubular adenocarcinoma and rarely mucinous or signet ring cell. Fibrous nodule, short or long segmental stenosis, or papillary.