

Hepatic Tumours

	Epidemiologie	Danger	Gross	Histologie	Clinical	Misc
<b>VASCULAR</b>						
Hemangioma	Most cmn primary tumor of liver.	benign	spongy, single red lesion, below liver capsule	thin vessels. Scars in ctr of lesions.		Cavernous (large vascular spaces) vs Capillary (small) hemangiomas. Usu found incidentally.
Infantile Hemangio-endotheliomas	Rare, but most cmn liver les'n in 1st yr of life.	benign	Multiple, not subcapsular.	irregular small vessels in fibrous stroma.	Tumors regress on own at 6-8mo of age.	cardiac failure from AV shunting. Hepatomegaly, cutaneous hemangiomas.
Angiosarcoma	Extremely rare.		Scattered small nodules, or single mass.	pleomorphic endoth cells forming small channels w/ blood, or sheets of cells.		RF: exposure to chemicals (thorotrast, vinyl chloride, arsenic). Arise from blood vessels of liver.
<b>HEPATIC</b>						
Focal nodular hyperplasia	70% female 30-50yo.	NO risk for malignancy.	Mass lesion w/ central scar (NON-cirrhotic bkgd).	1: focal lesion. 2: fibrotic bands forming nodules. 3: abnly thick-walled vessels in ctr of les'n. 4: central scar.	Exclusively seen in NON-cirrhotic livers. OCP's have trophic effect.	Is not clonal (arises from vascular malformat'ns).
Hepatic Adenoma	Reproductive age women w/ OCP Hx	low but extant malignancy risk.	well-circumscribed, 75% encapsulated; areas of hemorrhage. NON-cirrhotic bkgd!	Hepatocytes look nl. Lack of nl portal tracts and central veins. May have steatosis	Complicat'n is rupture of adenoma w/ intraperitoneal hemorrhage.	Also seen in pts w/ androgen use Hx or glycogen storage dz type I or III.

Hepatoblastoma	Infants and kids <3yo. 2:1 males.	Malignant	Single well-circumscribed lesion usu in RIGHT lobe. Hemorrhage, necrosis, calcificat'n.	epith cells mixed w/ immature mesenchymal cells.	90% tumors make lots AFP.	Wnt pthwy mutat'ns.
HCC	HCC is 80% primary liver carcinomas in US. 70% pts men. Dx usu made at 61yoa.	Invasive	Tumor green (bile) or yellow (fat). Hemorrhage and necrosis present. Satellite nodules.	Thick hepatocyte plates, absent portal tracts or central veins. Abnl arterioles outside of portal tract (HCC gets blood from hepatic artery). Neoplastic cells show big, dark nuclei, high N:C ratio.	Bad prognosis b/c of late stage tumors. >50, males, cirrhosis have worse prognosis. 85% HCC in cirrhotic livers. 1/3 HCCs make AFP.	RF: Cirrhosis from any cause, HBV, HCV, Aflatoxin from Aspergillus, other toxins. Chronic HBV is most imp't predisposing condit'n world-wide. HCC rare before 40yoa. HCC highest in SE Asia.
Fibrolamellar carcinoma	mean age 25 (younger pts).			bands of dense fibrosis running parallel to ea other. Lots pink cytoplasm, big nucleoli.	NON-cirrhotic bkgd. Metastasizes to lymph nodes more than usual HCC.	Is subgroup of HCC, 5% of all HCC's. No known RF's.
<b>BILIARY</b>						
Bile duct adenoma	rare	benign	Solitary, under liver capsule (firm white nodules).	Well-differentiated small round glands tightly packed together. No bile in tumors.		usu found incidentally.
Cholangiocarcinoma	Intrahepatic is increasing, extrahepatic is decreasing in prevalence.		can be found anywhere in biliary tree. White and firm, NEVER encapsulated. Usu cirrhotic bkgd.	Proliferating small glands forming duct-like structures. Dense desmoplastic response elicited. Perineural invas'n.	Extra-hepatic tumors assoc w/ chronic inflamm (PSC, Caroli's dz, parasites). Intra-hepatic are assoc w/ cirrhosis of any cause, EtOH, and chronic HCV/HBV.	Klatskin tumor: arises in hilum of liver. Cholangiocarcinomas are adenomas.