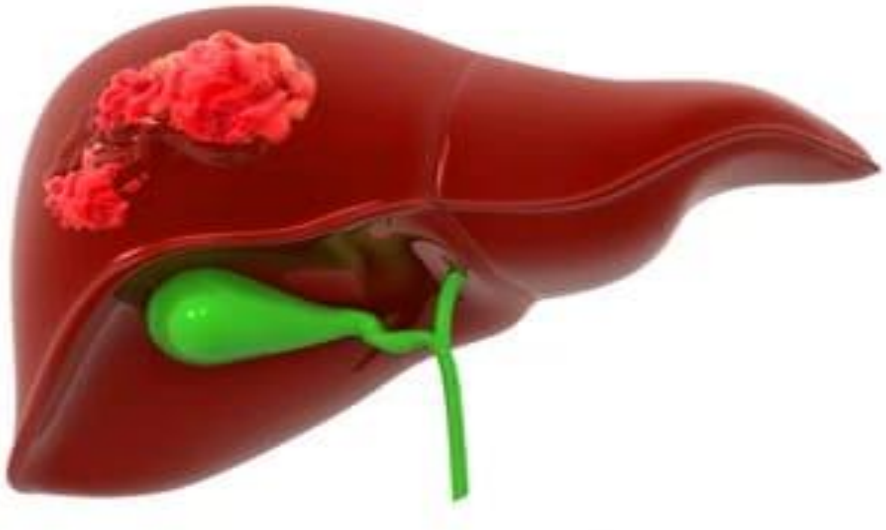
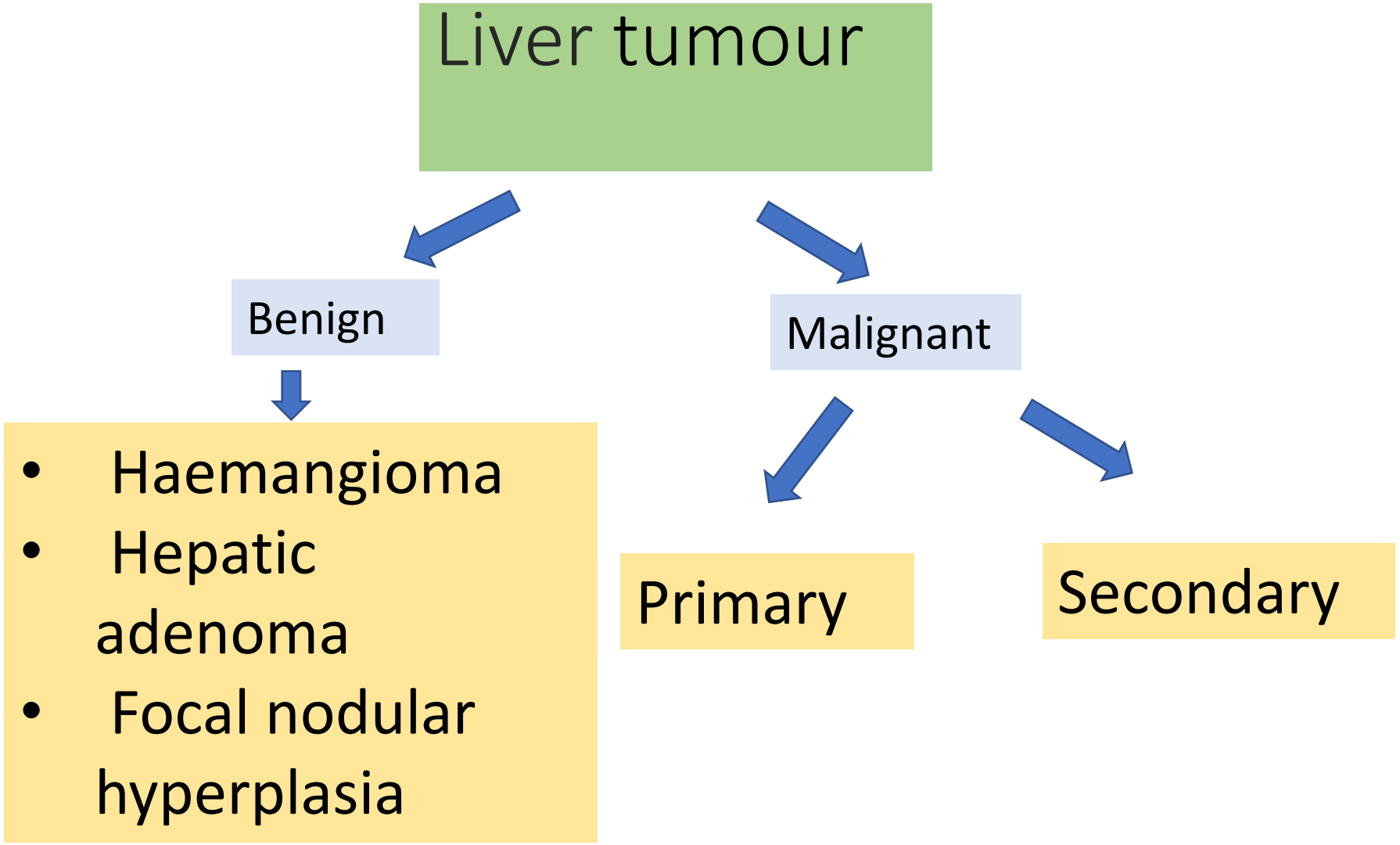
Liver Tumours




Liver tumour
Benign
Malignant
Haemangioma
Hepatic adenoma
Focal nodular hyperplasia
Primary
Secondary

Benign Liver tumour

Haemangioma

- most common liver lesions
- consist of an abnormal plexus of vessels
- Often multiple
- Asymptomatic in most of the times
- Does not show any malignant potential
- Infection

Haemangioma

Complications

- Can rupture if it is large (>8cm)
- Thrombosis
- Disseminated intravascular coagulation

Hemangioma

Investigations

- USS
- CT scan- delayed contrast enhancement shows the characteristic appearance of slow contrast enhancement due to small vessel uptake in the hemangioma.
- Percutaneous biopsy should be avoided.

Management

Radiotherapy → reduce size

Hemi hepatectomy

surgical resection only recommended if patients are significantly symptomatic or significant diagnostic uncertainty remains after multimodal imaging.

Hepatic adenoma

- Rare benign liver tumour.
- Seen almost exclusively in women aged between 25 and 50 years.
- Associated with use of the oral contraceptive pill.
- Generally solitary.
- It has malignant potential and 10% develop into hepatocellular carcinoma.

Investigations

- CT scan (well circumscribed and solid tumour)
- Angiography- Prior to resection
- Percutaneous biopsy or resection- Kupfer cells are absent.

Management

Surgical excision is generally recommended if >5 cm in size.

Some lesions may regress after discontinuation of the oral contraceptive pill.

Focal nodular hyperplasia

- Unknown etiology
- Usually occurs in middle aged females and there is no association with underlying liver disease.
- Does not have any malignant potential.
- Does not require any treatment or follow-up.

Malignant

Primary

Secondary

- Hepato cellular carcinoma
- Cholangio carcinoma
- Hepatoblastoma in children

Hepato cellular carcinoma(HEPATOMA)

- >80% of cases occurring in Asia and sub-Saharan Africa, with an incidence of 99 per 100 000.
- 90% of primary liver tumour
- Male > Female
- Right lobe > left lobe
- Usually unicentric, but can be multicentric

Risk factors

- Chronic liver disease- HBV, HCV
- Cirrhosis- Viral, Alcohol
- Afla toxin exposure
- Oral contraceptive pills
- Androgens/ anabolic steroids
- Hepatic adenoma
- hepatic non-alcoholic fatty liver disease (NAFLD).

Clinical features

Due to chronic liver disease -

- Malaise
- Weakness
- Jaundice and Ascites
- Variceal bleeding
- Encephalopathy
- Splenomegaly

Clinical features

- Due to advanced cancer - Weight loss
  Anorexia
- Abdominal pain
- Hepatic bruit

Malignant Spread

- Local invasion
- Portal vein invasion
- Other sites in the liver
- Hepatic vein invasion
- Lymphatic
- Vascular - lung, bone
- Trans coelomic

Investigations

For underlying liver disease -Serum bilirubin
Albumin
PT/ INR

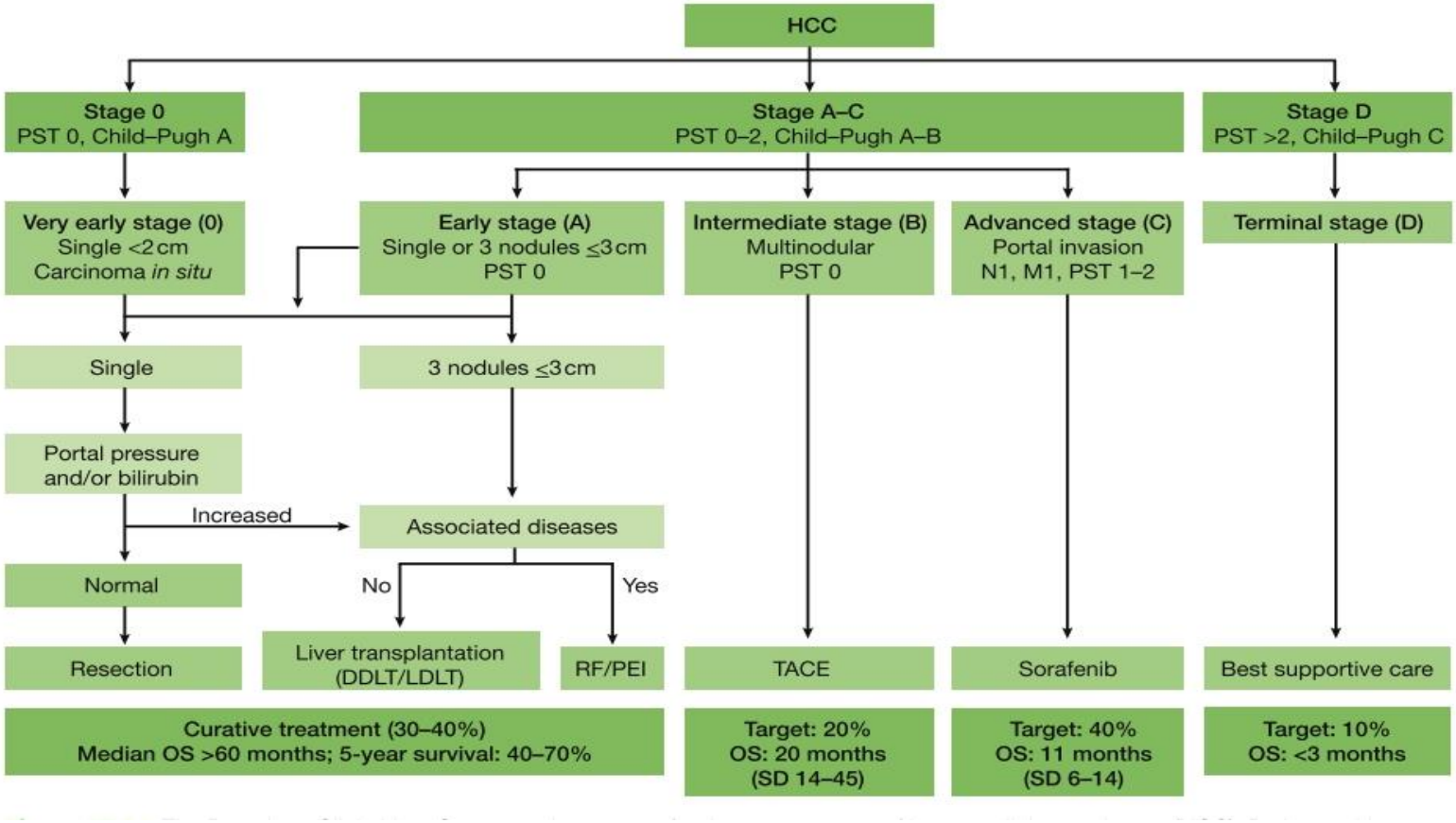
To diagnose the disease -Alpha feto protein
USS
CT abdomen
Contrast MRI

To stage the disease - CT abdomen and chest
Bone scan
Diagnostic laparoscopy

Barcelona Clinic Liver Group (BCLC) staging system

- Clinical staging systems
- Use to decide treatment options.
- most common staging system
- designed to define both prognosis and optimal treatment

Barcelona Clinic Liver Group (BCLC) staging system



Treatment

Surgical management

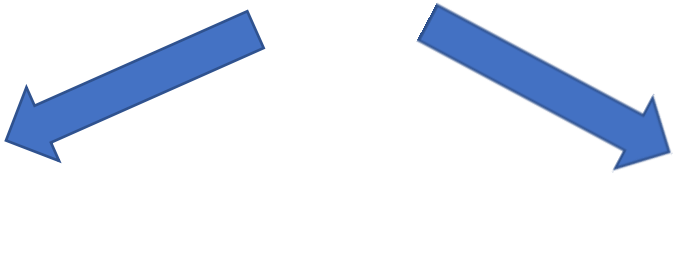
- Surgical resection- treatment for patients with preserved hepatic function

Orthotopic liver transplantation

Hepatic artery ligation

Treatment

Local ablation-
best treatment option for patients who have early stage HCC and are not suitable for resection /Orthotopic liver transplantation



Chemical

- Percutaneous Ethanol or Acetic acid injection.
- Trans Arterial Chemo Embolization (TACE)

Physical

Radio frequency ablation (RFA)
Local radiation therapy

prognosis

- Unifocal ,small tumours (2cm) have a good prognosis following hepatectomy ,especially patient without cirrhosis.
- The risk recurrence is 75% within 5 years.

cholangiocarcinoma

- Cholangiocarcinoma arises from the cells within the intrahepatic and extrahepatic biliary tree.
- Histology is adenocarcinoma

LIVER METASTASIS

Primaries metastasize to liver

Abdominal

Colorectal
Stomach
Small intestine
Pancreas
Kidney
Abdominal
Oesophagus

Extra abdominal

Melanoma
Breast carcinoma
Lung
Bladder
Prostate
Thoracic oesophagus

Route of spread

Direct spread → Stomach, Colon, Gallbladder, Bile ducts

Hepatic artery → Melanoma

Portal vein → Carcinoid tumour

Lymphatic spread → Breast, Lung

Clinical features

- Jaundice
- Loss of appetite and Loss of weight
- Ascites
- Supra clavicular lymph node enlargement
- Clinical features of primary
- Palpable liver- Hard, multinodular with central umbilication.

Investigations

- For primary → UGIE
  - Colonoscopy
  - Contrast X-Ray
  - CT scan
- Liver function tests
- USS abdomen
- Liver biopsy- if primary is not identified
- Tumour marker- CEA

Treatment

- Liver resection- increase 5 year survival
- Hemihepatectomy- if secondaries are in single lobe and primary is in the colon.
- Systemic chemotherapy- Treatment of choice
- Hepatic artery ligation or therapeutic embolization with clot/ gel foam
- Intra arterial chemotherapy (chemoembolization)
- Local ablation
- Microwave therapy
- Radiofrequency ablation

Thank You