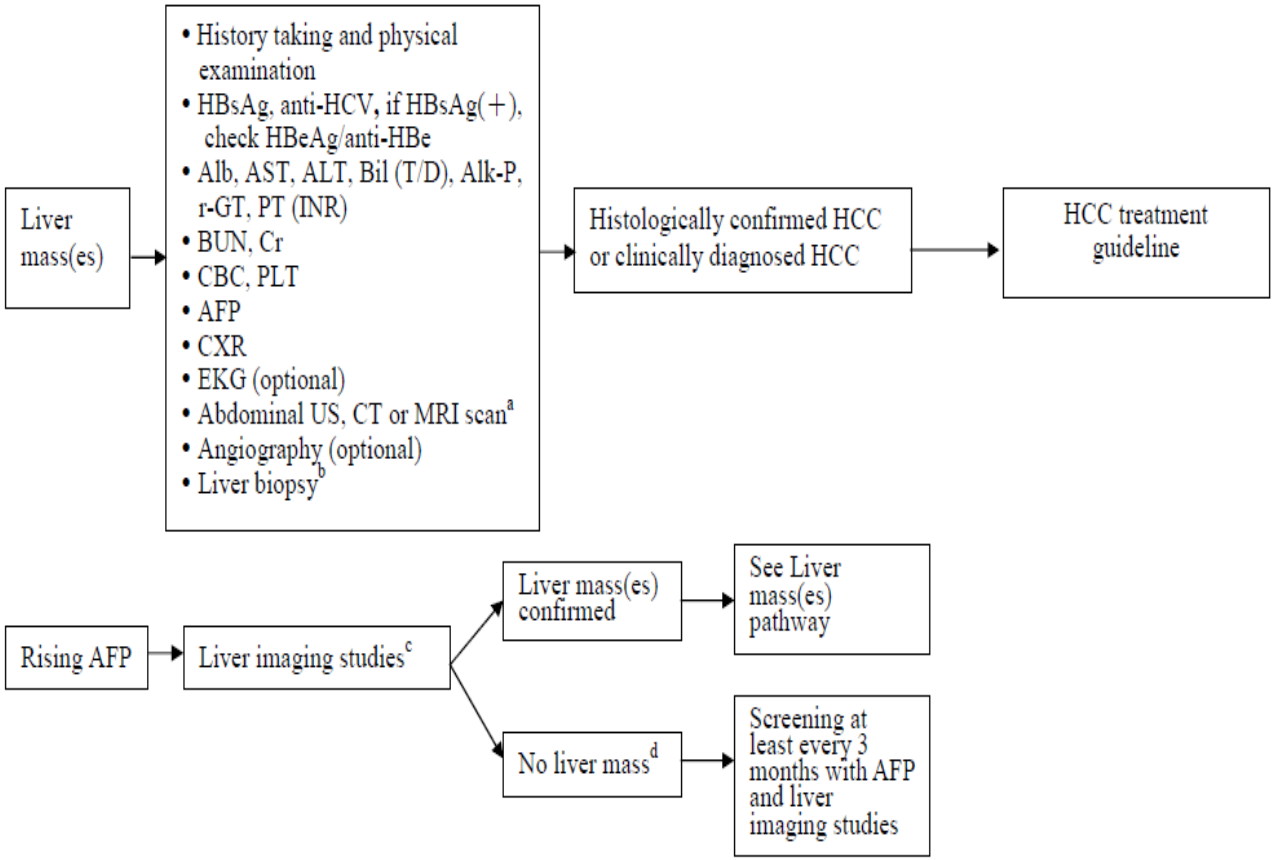
肝癌治療指引|肝癌治療指引|

中國醫藥大學附設醫院

2012/10/27



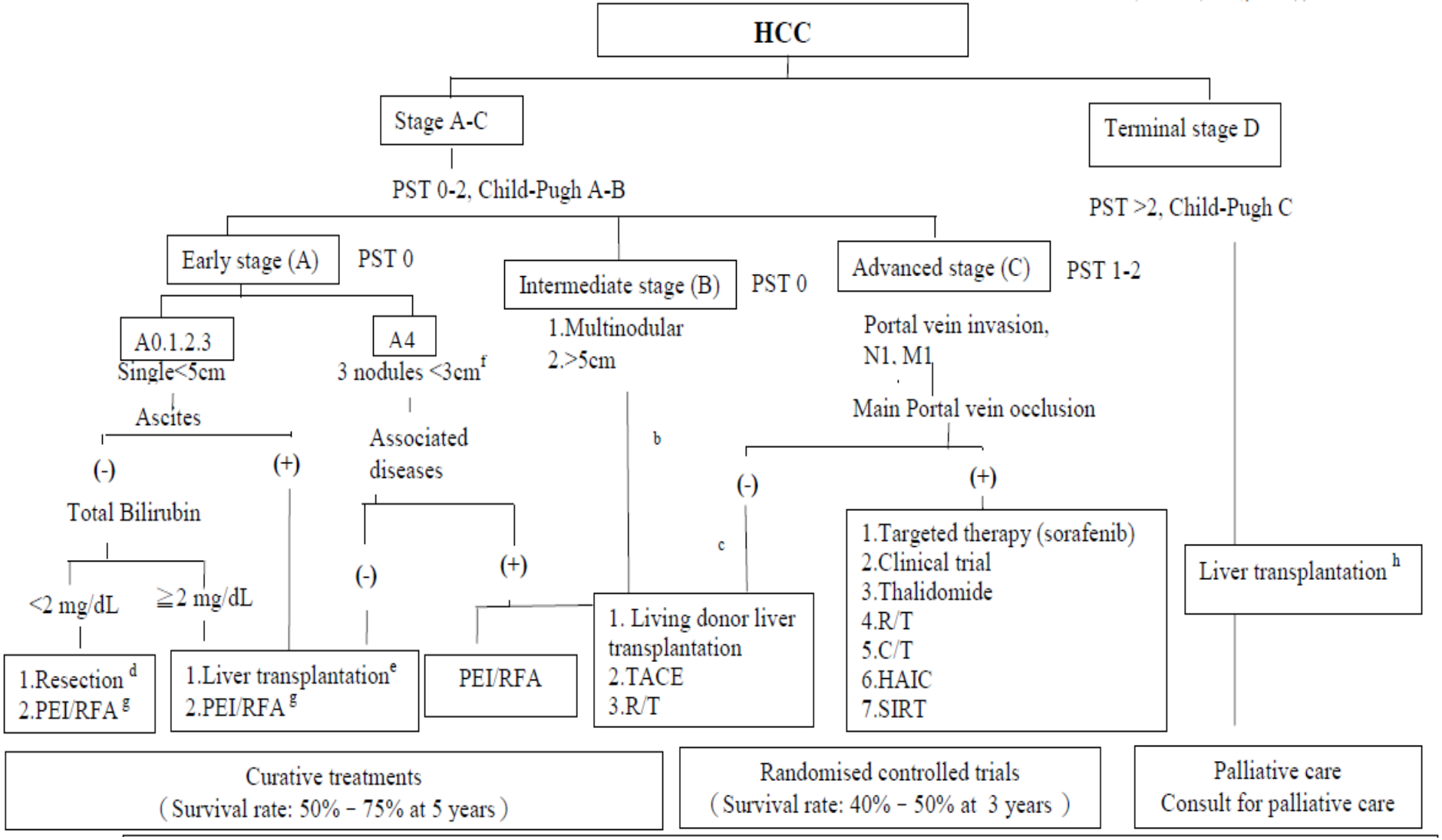
[a] CT or MRI scan to define extent and number of primary lesions, vascular anatomy, involvement with tumor, and extrahepatic disease.

[b] Liver biopsy is required to exclude metastatic hepatic tumor if less than 2 of the following

g 3 clinical diagnostic criteria is fitted: (1) HBsAg or anti-HCV(+) with liver cirrhosis; (2) At least one typical imaging study. Ultrasound is used as a screening tool. The lesions identified should be investigated further with either dynamic CT scan or MRI with contrast. At least one of the studies has to be typical of HCC; otherwise angiography is required. If the angiographic findings are not characteristic of HCC, biopsy should be performed. (3) AFP $\geqq$ 400 ng/mL.

[c] If ultrasound negative, CT or MRI scan should be performed.

[d] Rule out germ cell tumor if clinically indicated.



[a & b] If the number of nodules ≦3, localized in one lobe or not centrally located, resection may be indicated

[c] If the mass is in one lobe, Child-Pugh score is A and the tumor invasion is not beyond main portal vein, resection may be indicated

[d] ICG 15'RR: <15%➔ lobectomy, 15-30%➔ subsegmentectomy, >30%➔ wedge resection or enucleation

[e] UCSF criteria for deceased donor liver transplantation: single tumor ≦6.5 cm, number ≦3, each size ≦4.5 cm, total ≦8 cm

[f] RFA＋PEI may be indicated when single tumor with 3-5cm in size

[g] PEI/RFA may be considered if patient rejects surgery or tumor < 3 cm

h Expanding criteria for living donor liver transplantation: no evidence of extrahepatic metastasis or main portal vein thrombus

1. Criteria for partial hepatectomy (PH)
   (1) Allowable liver function
   (2) PVT or HVT can be removed
   (3) Free section margin
   (4) Usual indications:
   ➢Solitary tumor
   ➢Multiple tumors ≦3, each size ≦5 cm (determined by the location)
2. Candidate for liver transplantation (LTx)
   (1) Child B or C
   (2) No contraindication for LTx
   (3) No extrahepatic metastasis
   (4) Tumor size ≦5 cm
   number ≦3, each size ≦3 cm
   (Milan criteria for deseased donor liver transplantation)
   (5) Single Tumor ≦6.5 cm
   number ≦3, each size ≦4.5 cm, total ≦8 cm
   (UCSF criteria for living donor liver transplantation)
3. Criteria for PEI or RFA
   (1) Child A or B, No or minimal amount of ascites
   (2) Platelet ≧50,000/mm^3, PT prolongation ≦5 seconds
   (3) Ultrasound or CT identifiable and approachable lesions
   (4) Patients can cooperate and hold breath adequately
   (5) Liver tumor number ≦3, each size ≦3 cm or single tumor ≦ 5 cm
   (6) If tumor > 2-3cm, favor RFA
   (7) IV General anesthesia indicated in RFA
4. Criteria for TACE
   (1) Child A or B
   (2) Patent main portal vein or main portal vein thrombosis with cavernous transformation
   (3) Main portal vein obstruction but with peri-portal collateral circulation
5. Protocol for PEI or RFA
   Pre-PEIT evaluation:
   CBC/DC,WBC, PT, Alb, AST/ALT, Bil(T/D), BUN, Cr, AFP
   Ultrasound

Dynamic CT scan
MRI (optional)
Biopsy (optional, recommended if normal AFP levels)

PEIT:
Total volume (ml) of ethanol needed: $4/3\pi(r+0.5)^3$, r is the radius of the tumor in centimeter; preferably inject 2-10 ml of ethanol each session if the patient can tolerate
Schedule PEIT once to twice weekly

Post-PEI/RFA evaluation:
Clinical assessment of local side effects and bleeding complication
WBC/DC if infections cannot be ruled out
AFP every 1-3 months
Ultrasound and/or Dynamic CT scan/or MRI after completion of PEI/RFA
Schedule PEI/RFA again if dynamic CT scan shows viable tumors

6. Protocol for TACE
Pre-TACE evaluation:
CBC/DC,WBC, PT, Alb, AST/ALT, Bil(T/D), BUN, Cr, AFP
Ultrasound
Dynamic CT scan
MRI (optional)
Biopsy (optional, recommended if normal AFP levels)
Adequate hydration if borderline renal function

Post-TACE evaluation:
Clinical assessment of post-embolization syndrome
WBC/DC if infections cannot be ruled out
Alb/AST/ALT/Bil(T/D)/PT/Cr at 1-2 weeks after TACE (additional follow up if indicated)
AFP every 1-3 months
Ultrasound and/or Dynamic CT scan every 1-3 sessions of TACE
Schedule TACE every 1-3 months if dynamic CT scan shows viable tumors and liver function allows

7. Criteria for R/T to portal vein thrombosis or primary tumor
   (1) Absence of severe hapatoencephalopathy or uncontrolled ascites
   (2) Patient can cooperate
   (3) ECOG performance status ≦ 3
   (4) Total bilirubin ≦10 mg/dl

8. Protocol for R/T
   Pre-R/T evaluation:
   CBC, WBC & D/C, PLT, PT, Alb, AST/ALT, Bil(T/D), Alk-P, BUN, Cr, AFP
   Dynamic CT scan
   MRI (optional)

   Post-R/T surveillance:
   Alb/AST/ALT/Bil(T/D)/Alk-P at least every 2 weeks for 2 months, then every 1-2 months for 1 year, then every 3 months
   CBC, WBC & D/C, PLT, PT, BUN, Cr 1 month later
   AFP, if initially elevated, every 2 months in 1 year, then 3-6 months
   Imaging study 1-2 months later, then every 3-6 months

9. Indication for Hepatic Arterial Infusional Chemotherapy (HAIC)
   (1) HCC: advanced HCC, diffuse invasion type, portal vein thrombosis
   (2) Liver metastasis from colorectal cancer
   (3) Liver metastasis from gastric cancer
   (4) Liver metastasis from breast cancer
   (5) Intrahepatic cholangiocarcinoma

10. Protocol for Hepatic arterial infusional chemotherapy:
   (1) Cisplatin 10mg/1hr, D1-5/ 4w, 5FU 250mg/5hr, D1-5/ 4w
   (2) Cisplatin 7mg/1hr, D1-5/ 4w, 5FU 170mg/5hr, D1-5/4w
   (3) Cisplatin 20mg/30min, 5FU 250mg/2hr, W1,2,3,4,5,7,9,11,13,15

11. Chemotherapy: There is no large randomized, controlled clinical trial to demonstrate the survival benefit of systemic chemotherapy. Patients with good performance can be treated with doxorubicin-, epirubicin-, mitoxantron-, cisplatin-, 5-fluorouracil-, capecitabine-, etoposide- or gemcitabine-based chemotherapy after discussing with patient.