Case presentation

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Case 1

- A 35 year old M presented with HBsAg positive result. (March 2013)

- Back ground history
  - History of jaundice
  - intermittent bronchial asthma attack
  - Alcohol consumption on occasions
  - Family history

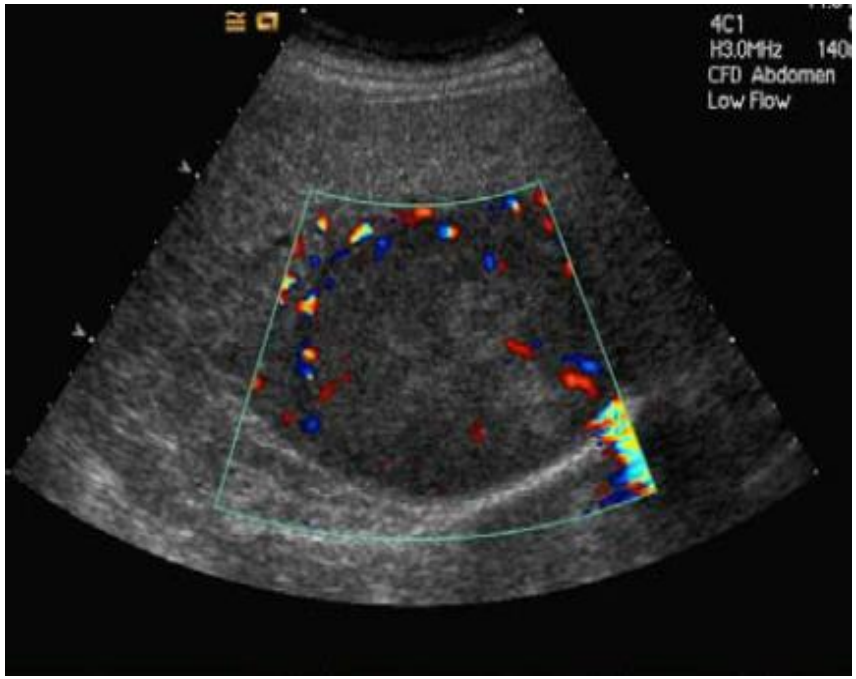
- Ascites

- Lab:
  - ALT and AST: 3x
  - ALP, INR, Bil & ALB: N
  - Plt: 90
  - HBeAg: negative
  - HBV DNA: 150,000u/ml

- Imaging: (US)
  - Cirrhotic liver, ascites
- EGD:
  - Grade 1 EV
- HBV related Liver cirrhosis (Child A)
- On TDF , diuretic

- Regular follow up (1 yr)
  - UGIB, Worsening of Ascites
  - Repeat EGD: Esophageal varices (2), red signs
  - Imaging: same (cirrhosis, PHTN, no mass)
  - VL: undetectable
- NSBB, diuretics optimized
- TDF continued

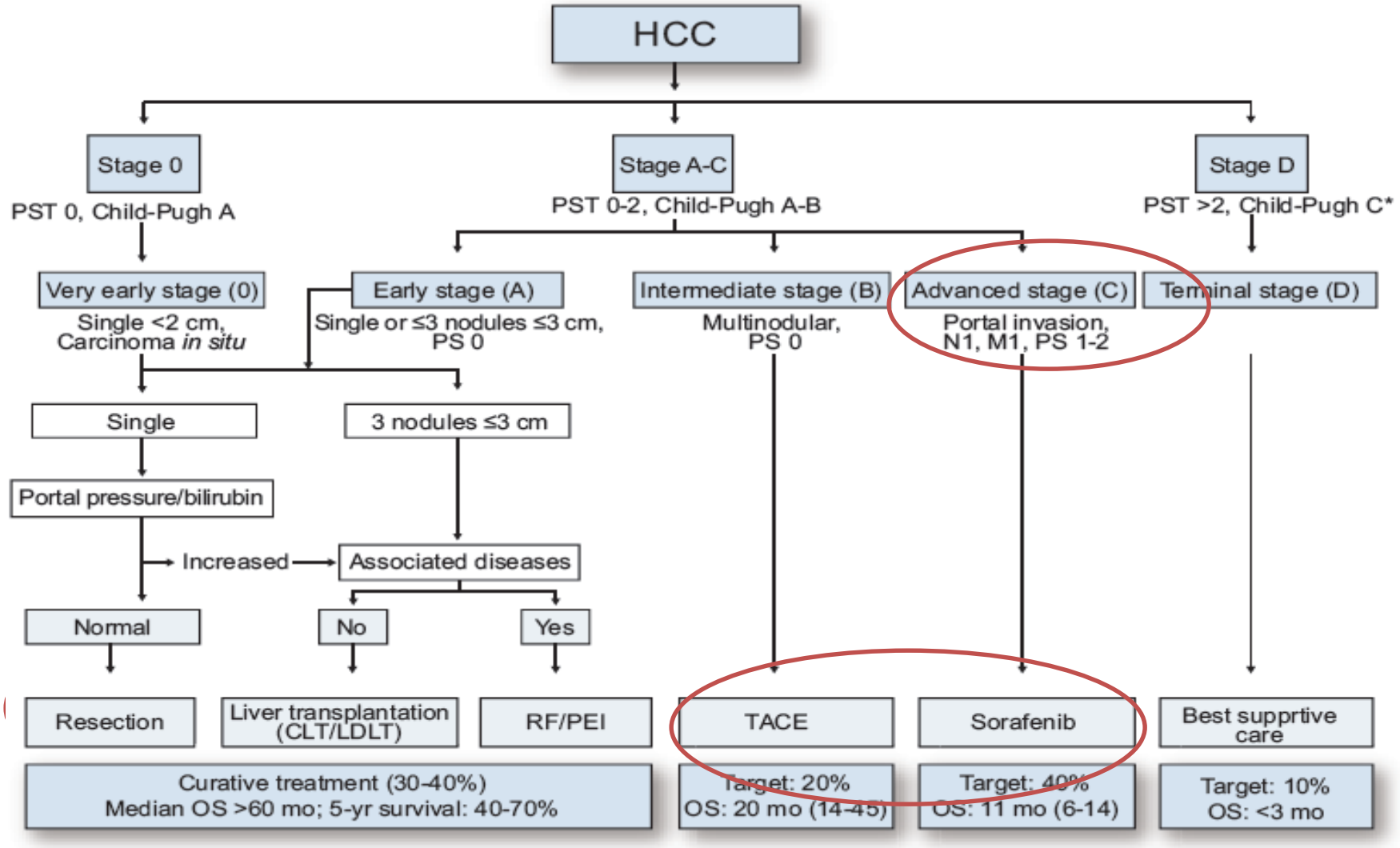
- Two years: on treatment:
  - Weight loss
- Imaging:US
  - Cirrhotic liver
  - Rt lobe mass, PVT
- CT: 7x5 cm mass, two more masses, PVT
- AFP: 10,500



Management

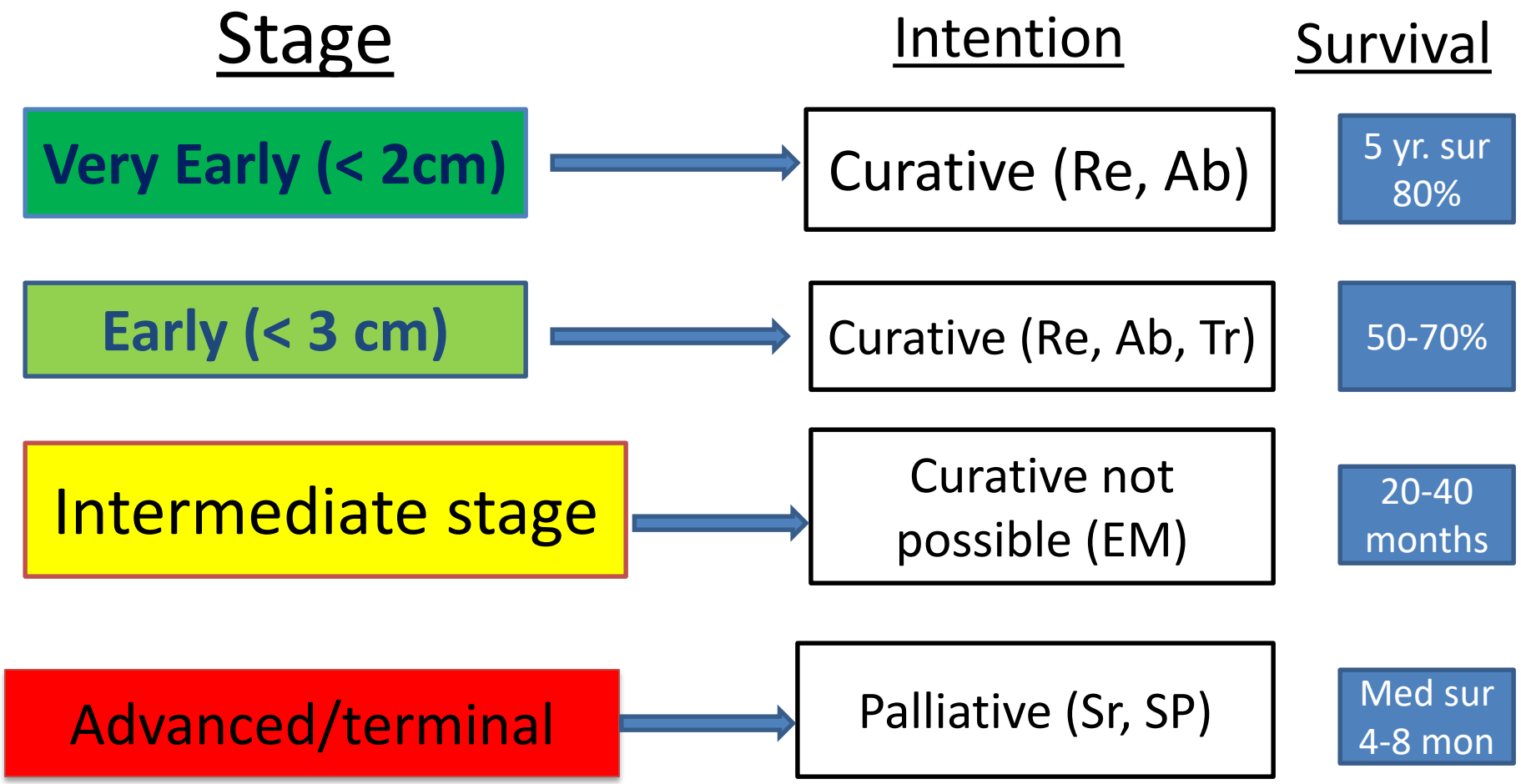
- Pretreatment assessment:
  - Tumor size, number and location
  - Vascular invasion
  - Metastasis
  - Liver function, severity, reserve, Portal hypertension
  - Functional status
  - Distinguish the stage (BCLC)

Case 1: Treatment algorithm for HCC (BCLC)



Liver Cancer 2015;4:85–95

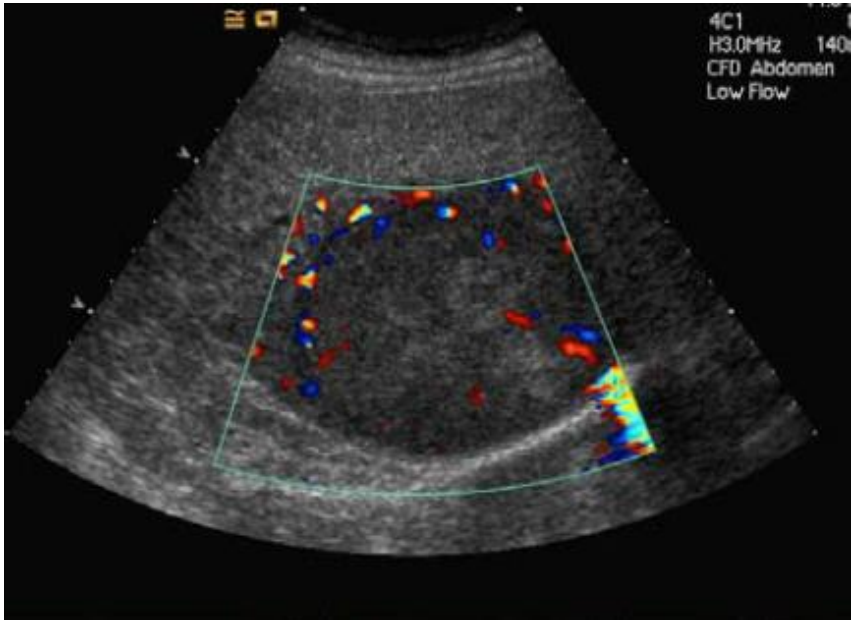
Management


Stage
Intention
Survival
Very Early (< 2cm)
Curative (Re, Ab)
5 yr. sur 80%
Early (< 3 cm)
Curative (Re, Ab, Tr)
50-70%
Intermediate stage
Curative not possible (EM)
20-40 months
Advanced/terminal
Palliative (Sr, SP)
Med sur 4-8 mon

Case 1: A 35 year old male with CHBV on TDF for 2 years

Evidence of cirrhosis

- CT: 7x5 cm mass, two more masses, PVT
- TARE performed
- Sorafenib
- Severe hyper-bilirubinemia and HE



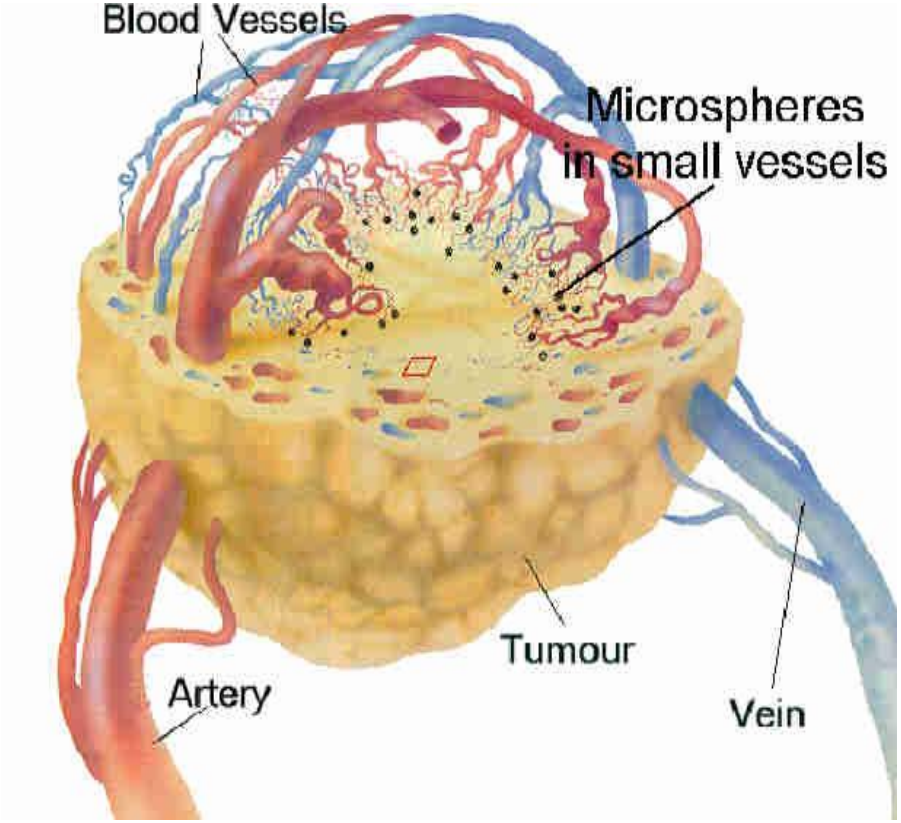
TACE

(Cisplatin, doxorubucin, Mitomycin)

- Un resectable Tumor
- Size > 5 cm
- Multifocal
- Bridge to transplantation
- Absence of PVT, HE, high bil

TARE (Yttrium-90 microspheres)

- In PVT (contraindication for TACE)
- Good outcome in preserved liver function in the presence of high tumor burden (7 or more)
- Downgrading to RFA
- Median survival: 16-18 months.

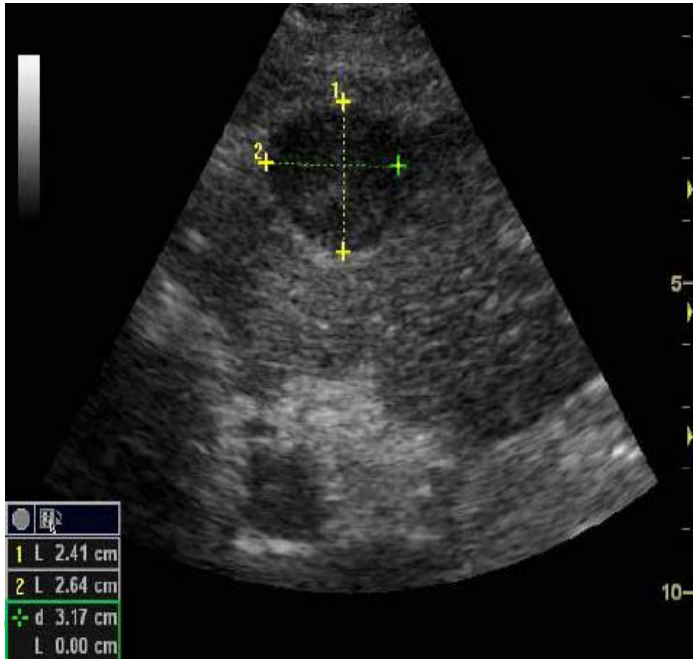


Case 2

- A 55 year old woman presented with RUQ discomfort.

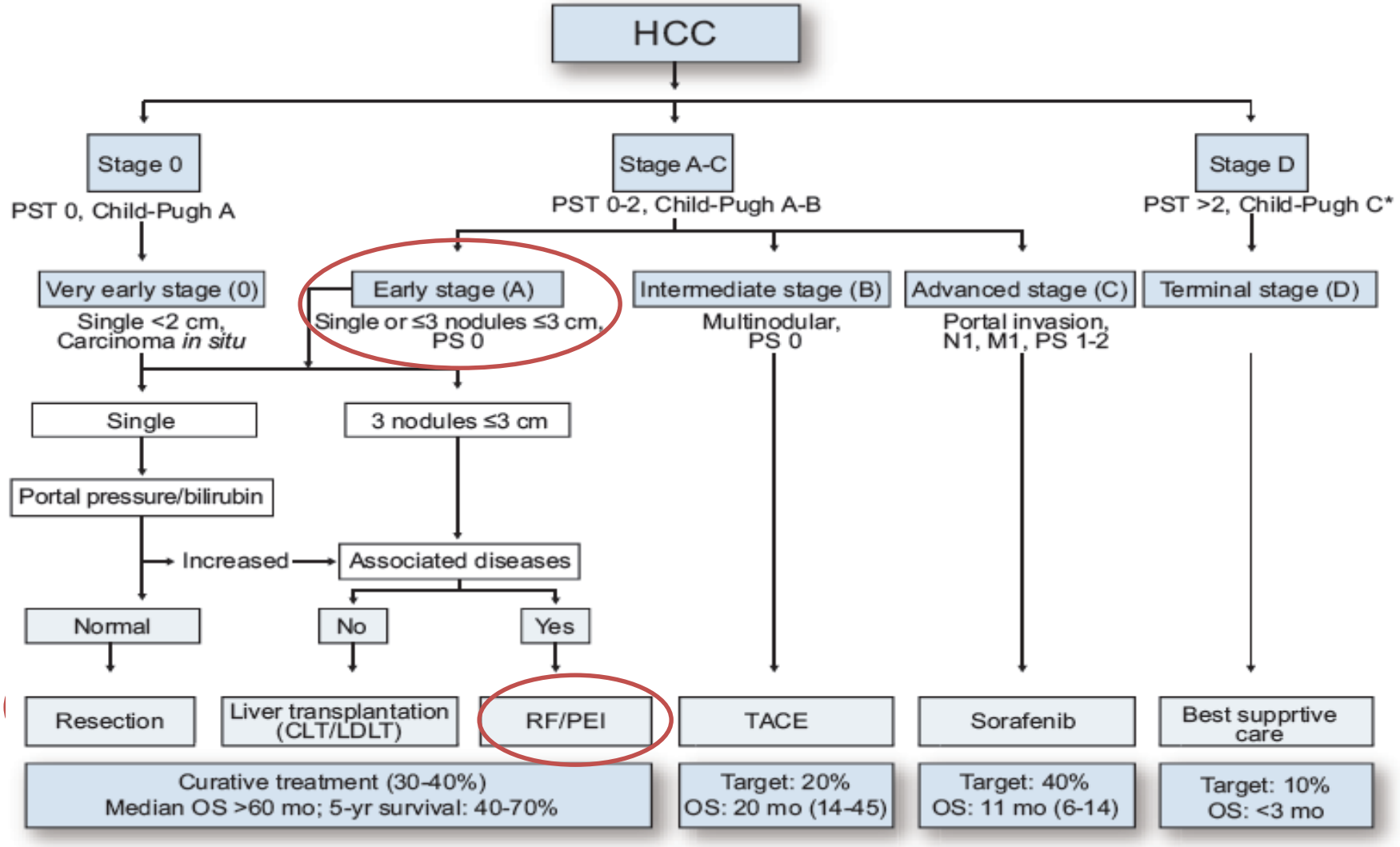
- Back ground history
  - Type II DM-5yrs on OHA
  - No family history of malignancy

- BMI 28
- HBsAg and Anti HCV Ab: N



- Abdominal US
  - Right lobe 2.4 x 3cm mass
  - Hyper-echogenic , irregular surface
  - Focal lesion? HCC)
- CT (triphasic): mass (HCC), no PVT, no metastasis
- AFP: N
- Liver biopsy: HCC

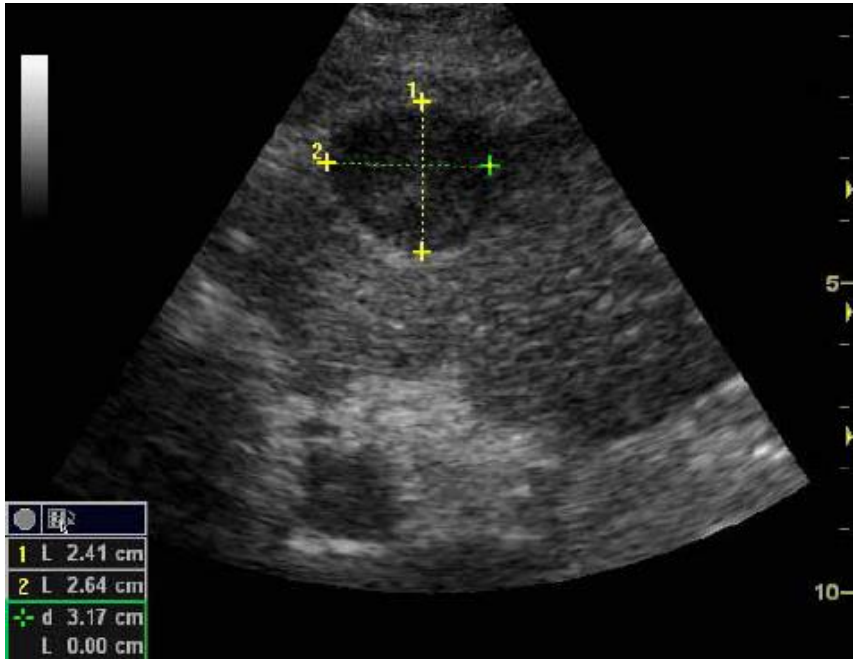
Case 2: Treatment algorithm for HCC (BCLC)



Liver Cancer 2015;4:85–95

Case 2: A 55 year old female Known Type II

- CT: 2.4 x 3cm mass, no PVT, no metastasis.



- Surgical: Intraop: cirrhotic liver (high risk for resection)

- Injecting therapy (ethanol), RFA

Percutaneous Ethanol Injection (<3cm)

Survival Rates (%)

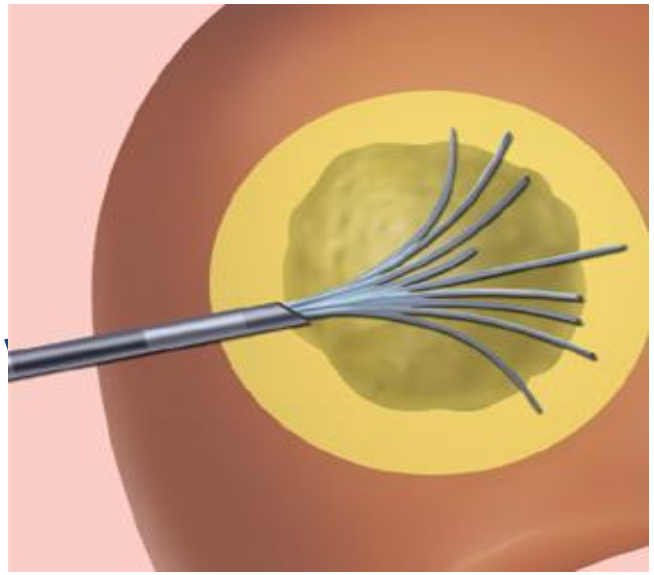
Child	1-yr	3-yr	5-yr
A	96	72	51
B	90	72	48
C	94	25	0

* < 3cm, 93/112 single

K. Okuda et al., *J Surg Oncol* 1993;3(suppl):97

RFA

- Surrounding tissue heat to induce coagulative necrosis.
- Lesion 3-5 cm, 3 or fewer lesions
- Comorbidities
- Metastatic



- Avoid (Large > 5 cm, blood v
  ducts , Child C)

RFA for HCC

Procedure	Survival		Recurrence	
	1 year	3 year	Local	Remote
RFA	100	72.7	18.2	40
Resection	97.9	83.9	2.2	43

SN Hong et al. J Clin Gastroenterol 2005;39:247 Samsung Medical Center, Seoul, Korea

Surveillance- How

- Ultrasound
  - Sensitivity: 29-100%
  - Operator dependent
- AFP:
  - Sensitivity of AFP: (41-65%)
  - Only 53% had raised AFP above 200
  - (longitudinal AFP, Age, Plt count, ALT- To improve sen and spe: needs more data)
  - AFP L-3, PIVKA-II (Jap guide line)
- Both US and AFP

Surveillance- When

- Every 6 months:
  - Sensitivity of 70% at 6 mon Vs 50% at 12 mon.

    Mourad A et al. Hepatology 2014; 59: 1471-1481

  - Japan guide line recommendation 3-4 months
    - more cases are detected

Summary

- HCC: screening and early detection even while on treatment
- NAFLD-HCC diagnosed at late stage/poor prognosis
- Prognostic evaluation is critical step (BCLC
- Assess liver function and tumor burden

Thank you