

In which of the following patients with hepatocellular carcinoma (HCC) is liver transplantation the most appropriate therapy?

- a. 52 year-old male with alcohol related cirrhosis (currently abstinent for 1 year) complicated by ascites and non-bleeding esophageal varices with two lesions in the right hepatic lobe measuring 4 cm and 2 cm in diameter, respectively.
- b. 55 year-old female with well-compensated primary biliary cirrhosis (CTP Class A) and a single 4 cm lesion in the left hepatic lobe.
- c. 40 year-old Vietnamese male with chronic HBV infection without cirrhosis and a 6 cm lesion in the right hepatic lobe.
- d. 50 year-old female with alcohol HCV-related cirrhosis, with 2 lesions in the right hepatic lobe (2 and 3 cm in diameter) and 1 lesion in the left hepatic lobe (3 cm in diameter).
- e. 60 year-old male with cirrhosis secondary to hereditary hemochromatosis with a 3 cm central right lobe lesion invading the right portal vein.

ANSWER: D. 50 year-old female with alcohol HCV-related cirrhosis, with 2 lesions in the right hepatic lobe (2 and 3 cm in diameter) and 1 lesion in the left hepatic lobe (3 cm in diameter).

Explanation: Choices B and C are incorrect because patients with non-cirrhotic liver disease or well-compensated cirrhosis (Child-Turcotte-Pugh Class A) should undergo hepatic resection for treatment of HCC.

The United Network for Organ Sharing (UNOS) restricts liver transplantation to patients who fit the “Milan Criteria”. To be eligible for OLT for HCC a patient cannot have any evidence of distant metastasis, vascular invasion (therefore, choice E is incorrect) and the total tumor size should fit the following criteria: a single lesion less than 5 cm in diameter or up to 3 lesions each up to 3 cm in diameter (therefore, choice A is incorrect).