Tattoo Tariff

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Pascal, 55, presents with a several-week history of adbominal discomfort and general fatigue. He has hepatitis C and his risk factor for viral hepatitis is significant due to a 20-year history of intravenous drug use (last use was 12 years ago), tattoo work (14 years ago) and a 25-year history of drinking (he quit 12 years ago).

Medical history

- Acute pancreatitis, cholecystectomy and osteoarthritis
- He is taking amitriptyline and arthrotec
- He is a non-smoker
- His family history is unremarkable

Physical examination

- Several cervical spider nevi
- No scleral icterus or lymphadenopathy
- Cardiovascular exam unremarkable
- Abdominal exam reveals no masses, tenderness or hepatosplenomegaly
- No ascites or peripheral edema

Clinical investigations

- Magnetic resonance imaging shows a 3 cm lesion in the lateral segment of the liver's left lobe. There is a strong suggestion of a pseudocapsule and of a hepatocellular tumour (Figure 1).
- The alfafetoprotein level is 5,090 units.

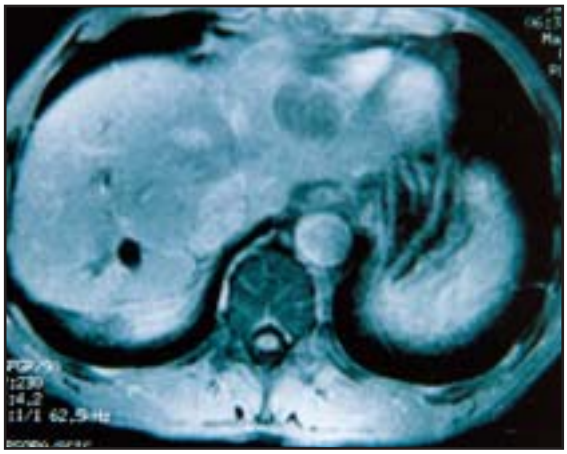

Figure 1. Hepatocellular tumour.

Blood work

- Hemoglobin: 132 mmol/L
- White blood cell count: 5.7 x 109/L
- Platelets: 124,000 x 109/L
- Liver function test: Normal
- Albumin: 40 g/L
- INR: 1.0

What's your diagnosis?

a) Liver cirrhosis
b) Left lobe cyst
c) Hepatocellular carcinoma
d) Choledocholithiasis

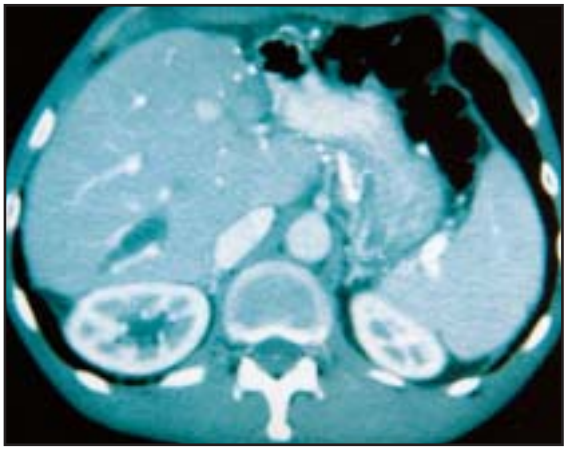

Figure 2. Liver after resection.

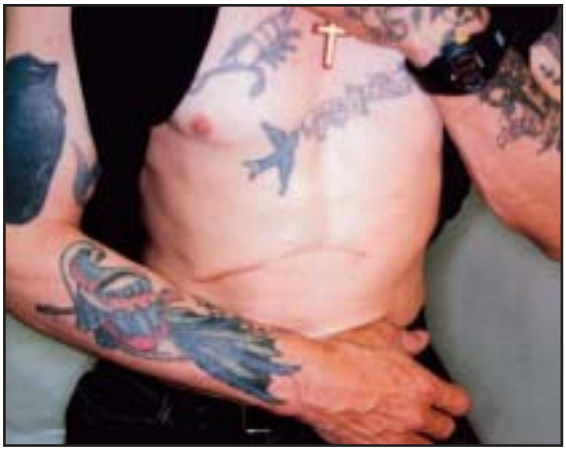

Figure 3. Scar after resection and skin tattoo.

Answer:
Hepatocellular carcinoma (HCC)

About HCC

Chronic infection with hepatitis B virus or hepatitis C virus substantially increases the risk of HCC. HCC is the fourth most common cancer in the world, with substantial morbidity and mortality. About 80% of people with HCC have cirrhosis. Screening for liver cancer is part of the management of patients with hepatitis B or C.

What tests are needed?

Most HCCs are first suspected based on the results of ultrasound or computed tomography scans. Blood alpha-fetoprotein (AFP) is a useful marker for the diagnosis of HCC. About 70% of patients with HCC have elevated blood AFP concentrations; however, it is not specific to this condition. A rising blood AFP concentration in someone with chronic liver disease suggests the development of HCC. Appropriate audiologic scans should be done in such instances.

The definitive diagnosis of HCC is made by biopsy. Usually, the liver mass is biopsied with a radiologic scan. Sometimes the mass is biopsed using a laparascope and, occasionally, an open surgical biopsy is necessary.

What is the treatment?

HCC is curable by surgery only if the tumour is small. Liver transplantation may also be curative for relatively small tumours. If the tumour is very large or has spread beyond the liver, surgery or liver transplantation may not be possible. For large tumours or cancer that has spread beyond the liver, chemotherapy, ligating or embolization of the hepatic artery, alcohol injection into the tumour or radiation may relieve symptoms and prolong life, but these procedures are not curative.

Pascal had no symptoms or signs of cirrhosis or portal hypertension. He had a small solitary nodule without vascular or distant metastases and he underwent surgical tumour resection (Figures 2 and 3). Dx

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