

Malignancy Presenting as Multiple Lesions in a Cirrhotic Liver: Not Always Hepatocellular Carcinoma

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A 65-year-old female with primary biliary cirrhosis (PBC) presented with four hepatic lesions, visualized on a routinely performed ultrasound. She had no complaints. Clinical examination was normal. Laboratory investigation showed elevated liver tests, with a bilirubin level of 21 IU/l (normal <16 IU/l) and gamma-glutamyltransferase of 222 IU/l (normal < 37U/l). Alfa-fetoprotein was 3µg/l (normal < 9µg/l). Magnetic resonance imaging of the abdomen showed cirrhosis of the liver with lesions in segments II, III, IV and VIII. The lesions demonstrated high signal intensity on T2-weighted (Fig. 1A) and diffusion imaging (Fig. 1B), including enhancement in the arterial phase after intravenous gadolinium administration, which raised suspicion of multifocal hepatocellular carcinoma. An extended left hepatectomy and radio frequency ablation were scheduled. During the laparotomy multiple lesions in the right liver and the ligamentum hepatoduodenale were found. Histology showed liver tissue with cirrhotic nodules and lymphatic lesions with populations of BCL2 positive B-cells, compatible with a marginal zone B-cell lymphoma (Fig. 1C). Staging showed an identical lymphoma in the bone marrow, compatible with stage IV non-Hodgkin's lymphoma (NHL). The patient was not responsive to immuno-chemotherapy and died after several weeks.

Hepatic involvement of NHL can cause an elevation of liver-associated enzymes due to diffuse infiltration, but typically does not result in hepatic dysfunction and very rarely manifests as circumscribed lesions. Therefore, NHL is often misdiagnosed as primary liver cancer, metastases, focal nodular hyperplasia

or abscesses. The risk for lymphoma in patients with PBC is negligible. Panjala et al. demonstrated that in 2,193 PBC patients only 13 cases were diagnosed with lymphoma [1].

The short survival of NHL with major liver involvement makes early diagnosis essential [2]. Due to better imaging, molecular and serological tests and the concern for the development of port-side metastases [3], less biopsies are performed. If the clinical picture is suspicious for NHL, a liver biopsy should be attempted.

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