REFERENCES

1. Kaukinen K, Halme L, Collin P, et al. Celiac disease in patients with severe liver disease: gluten-free diet may reverse hepatic failure. Gastroenterology 2002; 122: 881-8.
2. Demir H, Yüce A, Caglar M, et al. Cirrhosis in children with celiac disease. J Clin Gastroenterol 2005; 39: 630-3.
3. Freeman HJ. Lymphoproliferative and intestinal malignancies in 214 patients with biopsy-defined celiac disease. J Clin Gastroenterol 2004; 38: 429-34.
4. Oruc N, Ozutemiz O, Tekin F, et al. Celiac disease associated with B-cell lymphoma. Turk J Gastroenterol 2010; 21: 168-71.
5. Fattovich G, Stroffolini T, Zagni I, et al. Hepatocellular carcinoma in cirrhosis: incidence and risk factors. Gastroenterology 2004; 127(Suppl): S35-50.
6. Sorensen HT, Friis S, Olsen JH, et al. Risk of liver and other types of cancer in patients with cirrhosis: a nationwide cohort study in Denmark. Hepatology 1998; 28: 921-5.

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Lymphoma-like presentation of hepatocellular carcinoma

Lemfoma benzeri hepatoselüler karsinoma vakası

To the Editor,

Hepatocellular carcinoma (HCC) is the fifth most common cancer in the world, with 500.000-1.000.000 new cases per year, causing 600.000 deaths globally per year (1,2). Late HCC usually metastasizes to regional lymph nodes and lungs (3).

In this letter, we describe a patient with no known prior liver disease who was diagnosed as HCC and lymphangitis carcinomatosis of the lung secondary to HCC and metastasis to the lungs, mediastinal, cervical and paraaortic lymph nodes, and bilateral adrenal glands.

A 39-year-old male patient applied to our clinic with complaints of weight loss and epigastric and substernal pain. His mother and daughter had died due to hepatitis B cirrhosis.

On admission, body temperature was 38.2°C and pulse was 120/minute. His physical examination revealed bilateral posterior cervical painless lymphadenopathies (LAPs); the liver was palpated at the costal border and dullness at the space of Traube. Hepatitis B virus (HBV) DNA level was 1.67 x 1.000.000 IU/L, and alpha-fetoprotein (AFP) was 3.53 ng/ml.

Hepatomegaly and multiple hypoechoic and hyperechoic masses with indeterminate borders were detected by abdominal ultrasonography. Cervical ultrasonography showed multiple LAPs at the upper cervical chain and supraclavicular region.

Upper abdomen magnetic resonance imaging (MRI) findings were T1 hypointense and T2 hyperintense multiple liver masses in different segments of the liver. Diameter of the largest mass was 8 cm. Ascites was present around the caudate lobe. A lobulated contoured LAP package, which was pressing the pancreas head, was detected in the paraaortic region. Bilateral, hypointense, nodular masses measuring 2 cm were also detected in the surrenals. Radiologic diagnosis was metastatic liver disease.

Thorax tomography revealed bilateral hilar LAP

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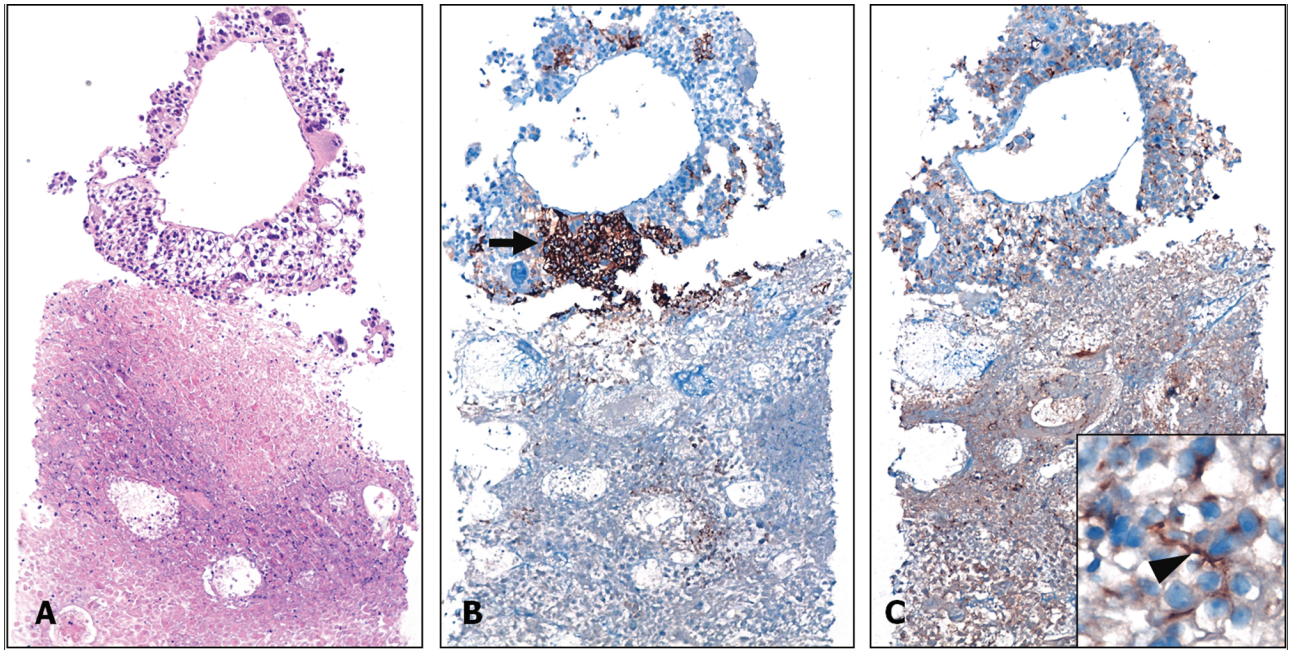

Figure 1. (A): Light microscopy showing largely necrotic tumor tissue and a small area of viable tumor tissue composed of round-polygonal cells (hematoxylin and eosin x100). **(B):** Focal cytoplasmic positivity for heppar-1 (arrow) (x100) and **(C):** Canalicular positivity (arrowhead) for CD10 (x100).

and an image that was compatible with lymphangitis carcinomatosis of the lungs. The colonoscopy was normal, and upper gastrointestinal endoscopy revealed grade I/III esophageal varices and congestive gastropathy.

Biopsy from the largest cervical LAP and liver mass demonstrated the same tumor cells as in the lymph node and liver core biopsy. Histopathologic examination of the liver needle biopsy showed necrotic tumor tissue with focal areas of viable tumor cells. The tumor was composed of sheaths of large polygonal cells with eosinophilic-clear cytoplasm and central nucleus. A few bizarre tumor cells were noted (Figure 1A). Immunohistochemical stains showed diffuse positivity for CK8/18 and focal positivity for hepatocyte paraffin-1 (Hep Par-1) (Figure 1B). Canalicular-positive staining was observed for CD10 (Figure 1C). Tumor cells were negative for AFP, pCEA, CD30, CD68, CD45, PLAP, and EMA.

Extrahepatic metastasis of HCC is usually to the lung, portal vein and lymph node(s) (4). Radiologically determined extrahepatic metastases of HCC were found in 37% and lung metastasis in 55% of all cases; however, distant lymph node and adrenal gland metastasis was detected in only 12% and 11% of cases, respectively (5). Another recently published study reported that adjacent organ invasion was seen in 1.6% and lymph node metastasis in 1.5% (6).

Only one case with HCC and lymphangitis carcinomatosis has been reported (7). Diagnosis of lymphangitic carcinomatosis is quite difficult. Patients generally complain of dyspnea and cough, which are the same presenting symptoms as for pulmonary embolus, another common illness within the cancer population, or respiratory distress secondary to pressure of LAPs on the airways in patients with lymphoma. The clinician should keep in mind that metastatic hepatocellular cancer can mimic lymphoma, and even though lymphangitis carcinomatosis is very rare, it can be a major cause of sudden death.

REFERENCES

1. Gomaa AI, Khan SA, Toledano MB, et al. Hepatocellular carcinoma: Epidemiology, risk factors and pathogenesis. World J Gastroenterol 2008; 14:4300-8.
2. Lau WY, Lai ECH. Hepatocellular carcinoma: Current management and recent advances. Hepatobiliary Pancreat Dis Int 2008;7:237-56.

3. Amador A,Monforte NG, Bejarano N, Marti J, Artigau E, Navarro S, Fuster J. J Hepatobiliary Pancreat Surg 2007;14:328-30.
4. Yeu-Tsu ML, Geer DA. Primary liver cancer: pattern of metastases. J Surg Oncol 1987;36:26-31.
5. Katyal S, Oliver III JH, Peterson MS, Ferris JV, Carr BS, Baron LR. Extrahepatic metastases of hepatocellular carcinoma. Radiology 2000:216;698-703.
6. Changchien CS, Chen CL, Yen YH, et al. Analysis of 6381 hepatocellular carcinoma patients in southern Taiwan: prognostic features, treatment outcome, and survival. J Gastroenterol 2008;43:159-70
7. Molina K, Valente PT. Lymphangitic spread of hepatocellular carcinoma. Arch Pathol Lab Med 2003; 127:e11-e13

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