#### Editöre Mektup / Letter to the Editor

# Advanced Stage Hepatocellular Carcinoma With Multiple Splenic Metastasis

## Multiple Dalak Metastazları Olan İleri Evre Hepatoselüler Karsinom Vakası

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#### Dear Editor,

Hepatocelluler carcinoma (HCC) is one of the most common primary tumors. Extrahepatic metastasis are seen only in 13.5-42% of the patients with HCC (1). The most common sites of metastasis are lung, lymph nodes, bone, adrenal gland and peritoneum. However, spleen metastasis is extremely rare (2-4). In this report, a case of advanced stage HCC with isolated multiple splenic metastasis was described.

A 68 years old, male patient suffering a abdominal pain and distension for a week admitted to our clinic. There was not any significant feature in his past medical history. On his physical examination, he had a sub-icterus in his sclera, abdominal tenderness, ascites and prominent vascular collaterals on his abdominal wall. The liver and the spleen were palpable. The patient had a history of 20-40 gr alcohol per day for 40 years, but not any significant feature in his family history. In the admission, laboratory values were as follow; albumin: 2.9 gr/dl, total bilirubin: 4.0 mg/dl, ALT-AST and platelet: normal, prothrombin time: 18.7 sec, serum-ascites albumin gradient: 2.1 gr/dl, HBsAg (+). There was a beta-gamma bridging in serum protein electrophoresis. In his gastroscopy examination, we determined grade-2 esophageal varices. Abdominal ultrasonography revealed ascites and splenomegaly. All tests performed for the etiology of chronic liver parenchymal disease (CLD) resulted as negative except for HBsAg. Etiology of CLD was considered as alcohol and chronic viral hepatitis B (CHB) in our patient. We calculated Child-Pugh score as 9. Beta-blocker for esophageal varices and diuretic for ascites were

initiated. Alpha-fetoprotein was determined higher than upper level of normal. In the abdominal computed tomography, there were signs of CLD and mass in the liver and hypodense lesions in the spleen. For the better resolution and characterization of the mass in the liver and hypodense lesions in the spleen, dynamic abdominal MRI was performed. Centrally necrotic, heterogen focally contrasted at early phase, wash-out at late phase, 9x7 cm mass was seen in right lobe of the liver in dynamic MRI scan. The mass was considered as hepatocellular carcinoma (HCC) (Figure-1a).



Figure 1. Hepatocellular carcinoma (a), spleen metastasis (b).

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In segment 7, there were a few satellite nodules with the biggest 2 cm sized. At the same time, multiple hyperintense nodules with the biggest 15 mm sized compatiple with metastasis were seen in the spleen in MRI scan (Figure-1b). Portal vein was thrombosed. Any other mass lesion were not determined in other abdominal and pelvic organs in MRI screening. In the gastroscopic and colonoscopic examination, there was not any gastrointestinal malignancy. Liver biopsy cannot be performed because of massive ascites and long prothrombin time. For HCC, sorafenib therapy was planned because of huge hepatic mass, thrombosed portal vein, splenic metastasis, Child-Pugh score B and Karnofsky performance score 1. The patient deteriorated after sorafenib therapy was admitted to hospital. The patient was considered as in terminal stage of HCC and initiated palliative treatment. He progressively deteriorated and died in 10 day after admission.

Hepatocelluler carcinoma frequently metastazised various organs. Lung, abdominal lymph nodes and bone are most common sites for metastasis. Spleen metastasis extemely rare, and seen only in %0.8 of cases (1-5). Most cases are metastatic, advanced stage HCC, and most of these are detected incidentally (1). As well as patients may be asymptomatic, they may be come with haemaperitoneum depending on the rupture of mass. Best of our knowledge, advanced stage HCC with isolated spleen metastasis was reported a few cases in the literature (5-10). Spleen rarely takes a metastasis from other organs because of its anatomical and functional structure. The most common route of metastasis to spleen is haematogenous (2). Ovary cancer (50%), malignant melanoma (33.3%) and colon cancer (16.2%) are the most common malignancies metastazising to spleen (1, 2, 4). Our case is an incidentally determined, advanced stage HCC with isolated multiple splenic metastasis, not having other primary malignancy besides of HCC. It can be rarely presented as a liver mass with isolated splenic metastasis. HCC should be take into account in the cases with splenic metastasis.

## Kaynaklar

 Katyal S, Oliver JH, 3rd, Peterson MS, Ferris JV, Carr BS, Baron RL. Extrahepatic metastases of hepatocellular carcinoma. Radiology 2000; 216: 698-703.
Hao YZ. [Imaging diagnosis of splenic metastasis]. Zhonghua Zhong Liu Za Zhi 1991; 13: 362-5.

3. Yamamoto R, Yamamoto S, Fukushima K, Ohmoto K, Hino K, Kojoh K, Ohumi Y, Ideguch S, Hirannao H, Hirokawa M. [Splenic metastasis of hepatocellular carcinoma]. Gan No Rinsho 1986; 32: 1486-90.

4. Texler ML, Pierides J, Maddern GJ. Case report: A hepatocellular carcinoma metastasis in the distal pancreas. J Gastroenterol Hepatol 1998; 13: 467-70. 5. Fujimoto H, Murakami K, Ozawa K, lino M, Kimura M, Fukunaga T, Shinozaki M. [Huge splenic metastasis from hepatocellular carcinoma; a case report]. Rinsho Hoshasen 1990; 35: 1439-42.

6. Horie Y, Suou T, Hirayama C, Nagasako R. Spontaneous rupture of the spleen secondary to metastatic hepatocellular carcinoma: a report of a case and review of the literature. Am J Gastroenterol 1982; 77: 882-4.

7. Katoh M, Takeuchi K, Murashima N, Nakajima M, Yamaguchi H, Endo Y, Hara M. Hepatocellular carcinoma with splenic metastasis developing after 16 years of chemotherapy for chronic myelogenous leukemia: a case report. Jpn J Clin Oncol 1994; 24: 111-5.

8. Fujimoto H, Murakami K, Nosaka K, Arimizu N. Splenic metastasis of hepatocellular carcinoma. Accumulation of Tc-99m HDP. Clin Nucl Med 1992; 17: 99-100.

9. Filik L, Biyikoglu I, Akdogan M, Oguz D, Koklu S, Koksal AS. Two cases with hepatocellular carcinoma and spleen metastasis. Turk J Gastroenterol 2003; 14: 138-40.

10. Duggal R, Garg M, Kalra N, Srinivasan R, Chawla Y. Spleen metastasis from hepatocellular carcinoma: report of a case with diagnosis by fine needle aspiration cytology. Acta Cytol 2010; 54: 783-6.