Primary lymphoma of liver : A case report and review of literature

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Primary lymphoma of liver (PHL) is a rare condition representing less than 1% of extra nodal lymphomas. In contrast, wide spread Hodgkin's lymphoma involves the liver in more than 50% of patients (1-3).

Recently there is an increased frequency of this tumor, especially in the immunocompromised patient (4). PHL is difficult to diagnose and should be considered in the differential diagnosis of solitary or multiple liver lesions especially when alpha-fetoprotein (AFP) and carcino-embrionic antigen (CEA) are normal. Early diagnosis of PHL is important because the prognosis appears to be favorable when combination chemotherapy is initiated early (1).

We report a case of primary hepatic lymphoma in an elderly patient, admitted to our department, and review the literature.

Case presentation

An 82 year old patient was admitted to our department due to a history of weakness during the last two months, 20 Kg weight loss and one week of upper abdominal pain. His past history was remarkable for ischemic heart disease, chronic obstructive pulmonary disease and cigarette smoking of 40 pack years.

Physical examination was unremarkable except for liver enlargement (liver span was 19 cm).

Laboratory studies including liver function tests and tumor markers (AFP, CEA) were within normal range with the exception of mild normocytic normochromic anemia (hemoglobin 10.6 gr/dl) and a slightly increased level of LDH (525 U/L). Anti HCV and HBsAg were negative.

Computed tomography of the chest and abdomen revealed hepatomegaly with multiple hypodense lesions of variable size involving the right and the left lobe of the liver, suspected for metastasis, without intraabdominal or thoracic lymphadenopathy (Fig. 1).

A Gallium scan demonstrated increased patchy uptake limited to the liver. Histological examination of liver needle biopsy revealed large B cell lymphoma, leukocyte common antigen and CD-20 (B cell marker) were found.

Bone marrow biopsy and gastroduodenoscopy were normal.

CHOP therapy (cyclophosphamide, doxorubicine, vincristine, prednisone) was started.

A computed tomography after the third course of chemotherapy demonstrated a remarkable improvement, with disappearance of most of the lesions (Fig. 2), and impressive clinical improvement was achieved.

Discussion

Primary hepatic lymphoma is a rare but important disease of the liver. It was first described by Ata and Kamel in 1965 (5). It frequently occurs in the fourth decade of life, with 4:1 male predominance (1). Hepatomegaly, abdominal pain, fever, weight loss and night sweats are the most common presenting clinical features but are nonspecific. In the past decade, an increasing number of cases of PHL have occurred in immunocompromised patients, particularly patients with human immunodeficiency syndrome (4). Laboratory tests typically show an elevated lactate dehydrogenase level and normal or mildly elevated transaminase levels ; however tests are negative for tumor markers as carcinoembrionic antigen and alpha-fetoprotein. In most cases there is a solitary mass of the liver on imaging studies, although multiple discrete lesions or diffuse infiltration of the liver may be evident (6). Most reported lesions are large cell lymphomas and about 80% of PHLs are B cell tumors (2). The optimal therapy for PHL remains unknown. In localized tumors good long term results have been achieved with surgery alone or combined with chemotherapy (7). Multiagent chemotherapy alone seems more appropriate in cases with diffuse infiltration and has led to prolonged remission (1-2) as in our case. Early diagnosis of this type of malignancy is the key for successful treatment and good prognosis.

We suggest that one should consider this type of malignancy in every patient with a solitary or multiple liver lesions, particularly when tumor markers are of normal range.

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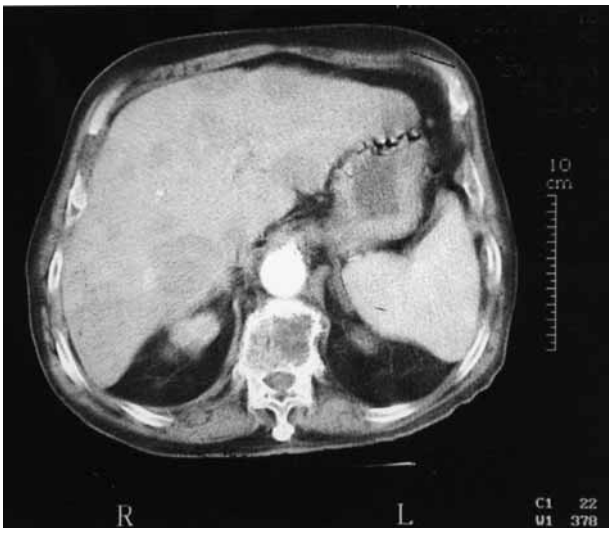

Fig. 1

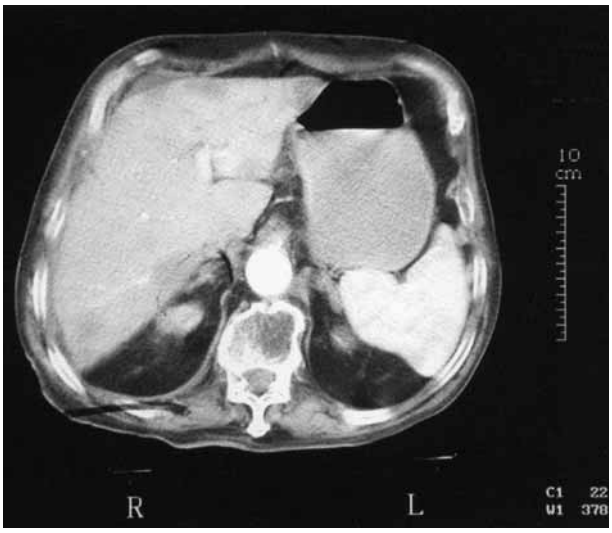

Fig. 2

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