

## Primary Liver Lymphoma

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### ABSTRACT

Primary liver lymphoma is rare. There is insufficient data on their prognosis. Clinical findings, laboratory and imaging methods have limited lead. Notification of long-term follow-ups of patients may be important in determining treatment protocols.

**Key words:** primary liver lymphoma, non-Hodgkin lymphoma

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### Introduction

The incidence of hepatic involvement of systemic lymphoma varies between 50 and 60%. However, isolated primary liver involvement without any other organ involvement is rare. Histologically diffuse large celled non-Hodgkin lymphomas contain 80% B lymphocyte surface markers. T-cell primer liver lymphomas are rarer but more mortal than B-cell lymphomas.[1,2] Primary liver lymphomas may be asymptomatic or may have nonspecific findings. B symptoms can be seen in 50% of cases. It can be seen with AIDS, chronic hepatitis B and C infections.[3] Because these tumors are rare, there is insufficient data on their prognosis.

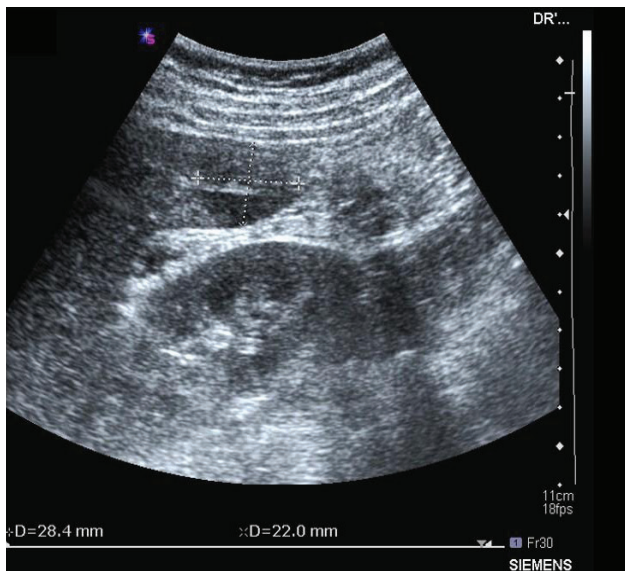
### Objective

Herein, we present a case of primary hepatic lymphoma who underwent surgical resection and discuss clinical, radiological and pathological features of the disease

### Case

A 37-year-old woman was admitted with a complaint of continuous abdominal pain for the past one month. Abdominal examination revealed no

pathological findings. Laboratory examination showed a hemoglobin value of 13.8 gr/dL, leukocyte count of 6400  $\mu$ L, platelets of 223.000  $\mu$ L with normal liver and kidney function test results. Tumor markers revealed no pathological findings. The hepatic markers, HBs\_Ag, and anti HCV were found to be negative. Beta-2 microglobulin was 1136 ng/mL, and LDH was 167 U/L. On abdominal ultrasonography, a 35x25 mm hypoechoic lesion with regular margins was observed in the posterior inferior segment of the right lobe of the liver. In the differential diagnosis, an angiomyolipoma, focal nodular hyperplasia, pseudotumor, and hepatocellular carcinoma were suspected. However, hepatic magnetic resonance imaging (MRI) revealed an atypical 4-cm lesion in the right lobe. Upper gastrointestinal endoscopic and colonoscopic examination revealed no pathological finding. Through non-anatomical resection of the liver, a diagnosis of low-grade B lymphoproliferative neoplasm was reported. Postoperative positron emission tomography-computed tomography (PET-CT) revealed no pathological finding. The patient was scheduled for follow-up visits without any medical treatment.



**Figure 1.** USG image of the mass in the liver

### Discussion

Early findings in the primary liver lymphoma are right upper quadrant pain and hepatomegaly. Fever, night sweats and weight loss can be seen in 50% of cases. There may be jaundice in some cases. Biliary obstructions are common in non-Hodgkin lymphomas. [4] In addition, a patient diagnosed with liver mass should have a high serum LDH level when AFP and CEA are normal. [1,2] Although not so often, the fulminant hepatitis tablets may develop. [5] Location

of imaging methods is limited. A mass lesion in the liver can be demonstrated by ultrasonography, computed tomography and magnetic resonance imaging. But hepatomegaly without mass can also be seen in the liver lymphoma. [1,6] Definitive diagnosis can be made by liver biopsy. Carcinoma, chronic active hepatitis, granulomatous cholangitis, inflammatory pseudotumor can be confused with symptoms. Findings of hemorrhagic necrosis like Budd-Chiari syndrome can be seen. [1,7] The treatment of primary liver lymphomas varies according to the condition of the liver. Mass excision or lobectomy can be performed. [7,8,9] Chemotherapy can be used in treatment. Jaundice effects treatment. If there is stubborn jaundice, local radiotherapy for palliation can be given. [9] Endoscopic and percutaneous interventions can be performed in case of biliary obstruction. [1] These tumors are rare, so there is absolutely no definite information about the prognosis. The notification of long-term follow-up data will contribute to the identification and implementation of the treatment.

Primary hepatic lymphoma is a very rare entity. Clinical, laboratory, and radiological findings play a limited role in the diagnosis, and the selection of the most appropriate treatment is often difficult, due to the lack of literature data. Prolonged follow-up of patients is of utmost importance in the selection of treatment protocols.



**Figure 2.** MRG image of the mass in the liver



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