

# A Rare Cause of Jaundice: Primary Hepatic Hodgkin's Lymphoma

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Dear Editor,

Local and diffuse involvement of the liver parenchyma in systemic diseases, including lymphomas, can usually be encountered. Primary hepatic non-Hodgkin's lymphomas (NHLs) constitute about 0.016–0.4% of all NHLs. Primary hepatic Hodgkin's lymphoma (PHHL) defines the existence of the disease only in the liver. The incidence of PHHL is unknown, and a small number of reports exist in the literature.<sup>[1,2]</sup> Herein, I describe a patient who was eventually diagnosed with PHHL.

A 25-year-old male patient was referred for weakness, jaundice, and nausea for about 10 days without chronic disease. He did not declare any use of alcohol, substances, or illicit drugs. No peripheral lymphadenopathy was noted at presentation, and the liver was slightly enlarged at the costal border. The total and direct bilirubin values were 6 mg/dl and 4 mg/dl, while the alkaline phosphatase and gamma-glutamyl transpeptidase values were 1000 U/L and 600 U/L, respectively. The albumin and international normalized ratio values were normal. The laboratory results for acute and chronic liver diseases were all negative. The bilirubin values were gradually elevated up to 35 mg/dl, with a direct bilirubin predominance (30 mg/dl).

In dynamic magnetic resonance imaging (MRI) of the liver, multiple lesions with high intensities were reported, where the largest lesion was 4.5 cm in diameter, and no diffusion restriction was seen within those lesions. In F18-fluorodeoxyglucose (FDG) positron emission tomography/computerized tomography imaging (PET/CT), no pathological FDG uptake (ametabolic) was noted within hypodense lesions in the liver, and whole-body PET/CT findings were normal.

To establish the exact diagnosis, a USG-guided biopsy of the liver lesions was performed, but intraperitoneal hemorrhage occurred. An exploratory laparotomy and surgical drainage operation were performed for an intra-abdominal abscess. The diagnosis of the surgical liver biopsy sample was nodular sclerosing Hodgkin's lymphoma. The patient received an ABVD (doxorubicin, bleomycin, vinblastine, and dacarbazine) chemotherapy regimen but did not respond to the treatment, and unfortunately, he died.

Primary hepatic lymphomas can appear as solitary lesions (60%) or multiple lesions (35–40%), and PHHLs are reported to present as solitary nodular and hyperintense lesions in MRIs.<sup>[3]</sup> The MRI findings of our patient also revealed diffuse and discrete solitary lesions. Although PET/CT has a diagnostic accuracy for Hodgkin's lymphoma (HL), no FDG uptake (ametabolic) of the liver lesions in this case was a diagnostic challenge.<sup>[4]</sup> No FDG uptake may be due to the deficiency of glucose transporter-1 in neoplastic cells. The biopsy sample was not consistent with the vanishing bile duct syndrome, which is a leading cause of cholestasis in HL.<sup>[5]</sup> Our patient presented solely with intrahepatic cholestasis, and it may be due to the affected organic anion pumps that excrete bilirubin and might be a unique paraneoplastic manifestation of PHHL.

According to the literature, this was the first case of a nodular sclerosing type of PHHL, which is also the most frequent type of HL. In conclusion, the presentation of PHHL may be extraordinary, and PHHL should be taken into consideration in cases of unexplained cholestasis and jaundice.

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**Conflict of Interest**

None declared.

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