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Case Report **General Surgery**

Solitary Hepatic Lymphangioma: A One-Case Report

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Abstract

Hepatic lymphangiomas, malformations of the liver lymphatic system, are extremely rare conditions in adults. In our article, we report the case of a 65-year-old female patient in whom a hepatic lymphangioma was incidentally discovered during surgery for gallstone disease. We discuss the diagnostic and therapeutic aspects of this condition through a literature review.
Keywords: Liver, lymphangioma, treatment.

INTRODUCTION

Hepatic lymphangioma is a rare benign tumor resulting from the cystic dilation of lymphatic vessels within the hepatic parenchyma. It is generally associated with systemic lymphangiomatosis, and isolated cases of hepatic lymphangioma in adults are extremely rare [1, 2]. The prognosis of these lesions is favorable, with surgical resection usually sufficient to cure the condition.

We report the case of a patient in whom hepatic lymphangioma was incidentally discovered during a scheduled surgery for gallbladder lithiasis, along with a review of the literature.

CASE REPORT

The patient is a 65-year-old woman with no significant medical history, admitted to the department for the management of symptomatic gallbladder lithiasis.

Ultrasound revealed a gallbladder with multiple lithiasis, thin walls, and no signs of complications. The liver appeared normal.

During laparoscopic cholecystectomy, we noted the presence of a whitish tissue-like formation approximately 5 cm in diameter located across segments III and IV of the liver (Figure 1). Further exploration of the abdominal cavity revealed no other similar lesions. A biopsy of this formation was performed.

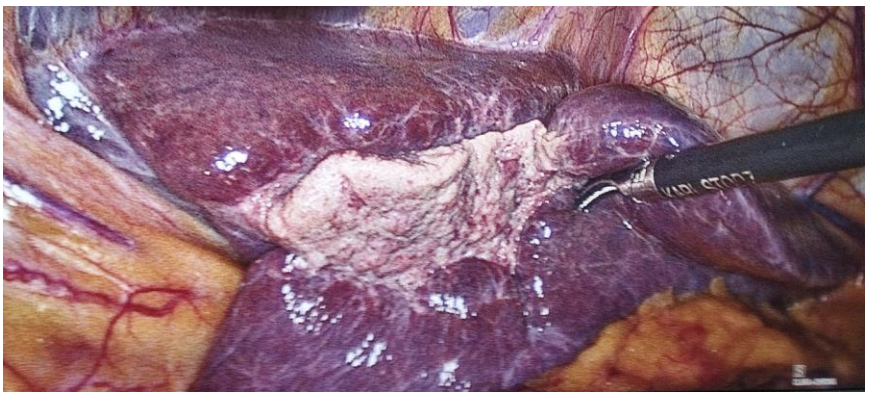

Figure 1: Intraoperative image

We completed the cholecystectomy and performed a biopsy of the lesion. The postoperative course was uneventful, and the patient was discharged the following day.

Histopathological examination of the hepatic biopsy revealed fibro-adipose tissue containing cystic cavities of variable size with a lymphatic appearance. These cavities were lined with a flattened, regular endothelium. Some contained pale, homogeneous eosinophilic material punctuated by inflammatory elements, mainly lymphocytes, along with areas containing erythrocytes. The interstitial tissue also showed an inflammatory infiltrate predominantly composed of lymphocytes and plasma cells. This morphological appearance is consistent with hepatic lymphangioma (Figure 2 & 3).

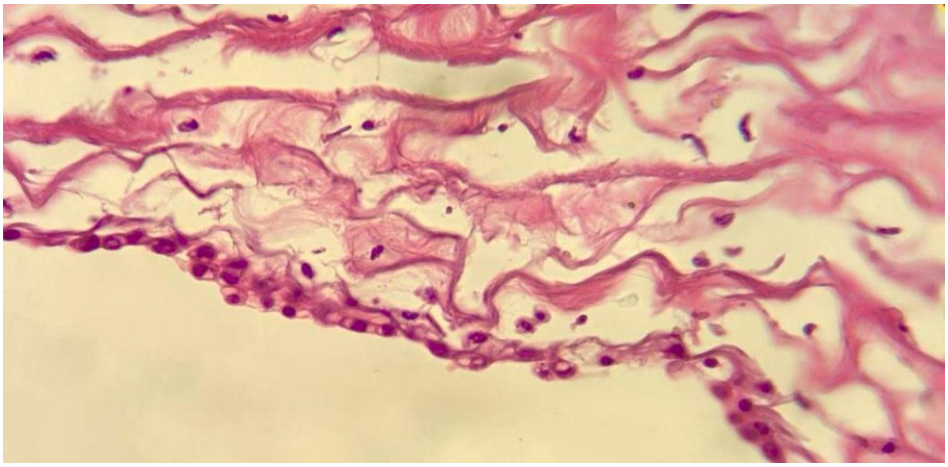

Figure 2: Endothelial lining × 40

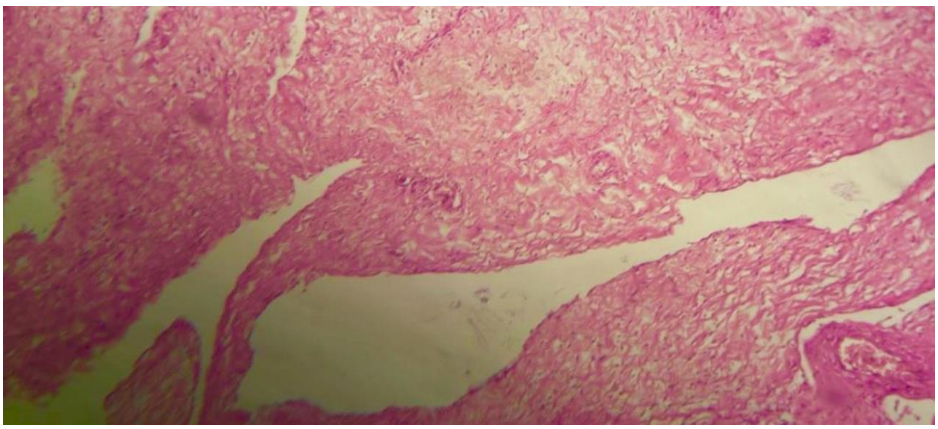

Figure 3: Lymphatic cystic cavities of variable size × 20

Our decision was to opt for therapeutic abstention for this asymptomatic patient, with regular follow-up monitoring.

DISCUSSION

Lymphangiomas are generally considered congenital malformations of the lymphatic system, primarily manifesting in the neck, mediastinum, and retroperitoneum. Their occurrence in the liver is extremely rare [1, 3].

Hepatic lymphangiomas typically present with nonspecific clinical symptoms, such as diffuse abdominal pain or the perception of a mass on the affected side [1, 4]. The main complaints are often related to compression of adjacent structures by the large lesion.

Histologically, lymphangiomas can be divided into three groups: capillary, cavernous, and cystic lymphangiomas [5]. The exact pathogenesis of lymphangiomas remains largely unknown, although congenital abnormalities in the development of lymphatic tissues, dilation of abnormal channels, and localized lymphatic obstruction are considered important causes [5, 6]. Other hypotheses include trauma, inflammatory and fibrotic processes, as well as endothelial permeability disorders.

On ultrasound, CT, and MRI, a hepatic lymphangioma may appear as a cystic or multicystic mass with internal septations, making it challenging to differentiate from other cystic diseases such as biliary cysts, biliary cystadenoma, cystadenocarcinoma, or hepatic hydatidosis [7]. However, MRI is very useful for

distinguishing a lymphangioma from a true solid tumor [8].

Hepatic lymphangiomas generally have a favorable prognosis. Surgical resection is the treatment of choice for symptomatic cases or when the diagnosis is uncertain. Complete resection prevents recurrence, and most patients do not require additional treatment after surgery. However, in rare systemic cases involving multiple organs, management may be more complex, and the long-term prognosis depends on the extent of systemic involvement [1, 3].

Alternative therapies for patients who are not eligible for surgery include ethanol or OK-432 injection [9] (Springer) directly into the lymphangiomas [10] (Springer). However, this approach does not allow for an accurate diagnosis.

CONCLUSION

A solitary hepatic lymphangioma in an adult is extremely rare and, in the absence of specific clinical symptoms, can easily be mistaken for other pathologies.

The standard treatment for a hepatic lymphangioma is complete surgical resection, as incomplete excision often leads to recurrence [4]. Liver transplantation may also be considered for patients with giant unresectable hepatic lymphangiomas or impaired liver function [11]. The prognosis following complete resection is excellent.

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