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(CASE REPORT)

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Mesenchymal hamartoma of the liver

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Abstract

A 4-year-old girl was diagnosed with cystic mesenchymal hamartoma, a rare benign tumor of the pediatric liver. Initial imaging studies and subsequent anatomopathological examination confirmed the diagnosis. Clinical findings included an abdominal mass detected since age 1, progressive hepatomegaly, and normal systemic health without signs of cholestasis. Surgical resection was successful, with no postoperative complications observed at the 1-year follow-up. This case highlights the importance of considering cystic mesenchymal hamartoma in pediatric liver tumor diagnoses, particularly in cases with characteristic imaging features and absence of cholestasis.

Keyword: Cystic Mesenchymal Hamartoma; Peditric; Liver; Complete resection; Hepatectomy Anatompathological Examination

1. Introduction

Cystic mesenchymal hamartoma is a rare benign tumor of the pediatric liver. Very few cases are reported in the literature.

We report an observation of a mesenchymal hamartoma, diagnosed in a 4-year-old girl . The diagnosis was evoked on imaging and confirmed after anatomopathological examination of the surgical excision specimen

2. Clinical case

It is about a 4 years old girl who presented since 1 year old, an abdominal mass progressively increasing in size evolving in a context of apyrexia and conservation of the general state without disorders of the transit and without any signs of clinical cholestasis.

The clinical examination found a hepatomegaly going to the right flank.The abdominal ultrasound (Fig 1) was in favour of a cystic lymphangioma of the mesentery.

Abdominal scan (Fig 2 and 3) showed an multi-cystic mass occupying all the segments of the right liver, in particular segments V, VI, VII, VIII , making it possible to suspect a cystic mesenchymatous hamartoma at first, the biological work-up showed cytolysis, no biological cholestasis , blood concentrations of alpha-fetoprotein and gonadotropic chorionic hormone (beta-HCG) were within the normal range.

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The lesion was resected in its entirety by a right hepatectomy with conservation of lobe I .(Fig 4and5) the anatomopathological study of the surgical specimen was in favor of a mesenchymal hamartoma,the postoperative follow-up was simple,currently at 1 year postoperative, the patient has no particular signs.

3. Discussion

Hepatic mesenchymal hamartoma is an interesting pediatric liver lesion with a debatable pathogenesis. However, in view of several reports of cytogenetic abnormalities, the neoplastic etiology of this lesion appears the most probable.[1] The pathogenesis of liver hamartoma still remains a subject of controversy. Some authors believe that it is a developmental anomaly due to an excessive uncoordinated proliferation of the primitive mesenchyme. It has been suggested that this aberration occurs late in embryogenesis, because the liver adjacent to the lesion has a normal architecture [2]. Others assume that it is a true neoplastic process; indeed, cytogenetic abnormalities have been found in some cases of liver hamartom as chromosomal translocations involving a break in the long arm of chromosome 19 (band 19q13.4) [3] Mesenchymal hamartoma of the liver occurs in the right liver lobe in approximately 75% of all cases,others occur in the left lobe; the tumor involvement of both lobes is less than 5% [4].Mesenchymal hamartoma of the liver: a systematic review.[5] Excision may be by conventional hepatic resection or by nonanatomical excision with a small margin of normal liver. Pedunculated lesions are amenable to laparoscopic resection [6] Despite the relative hypovascularity of most lesions, the adjacent hepatic parenchyma may be very vascular. With modern techniques, complications during or after tumor resection are uncommon. Fatal hemorrhage is exceptionally rare [7] , After complete resection, occasional clinical and US review is advisable for at least 5 years [8], but an excellent prognosis can be anticipated.

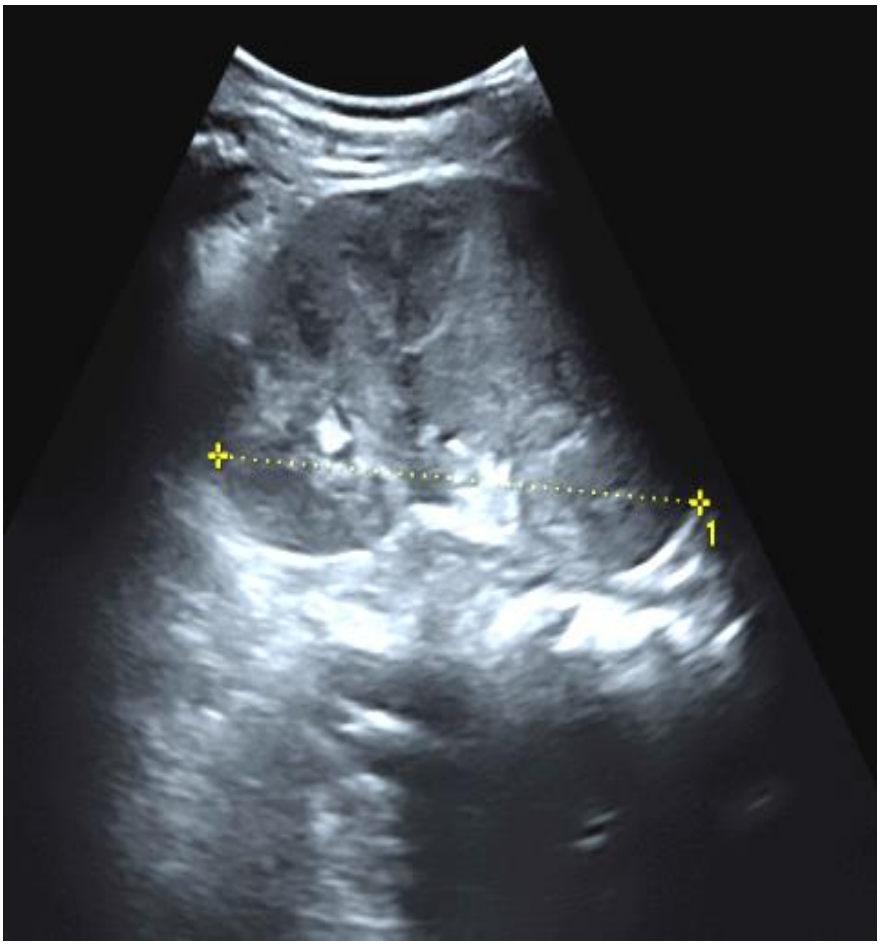

Figure 1 Abdominal ultrasound : suspicion of cystic lymphangioma of the mesentery

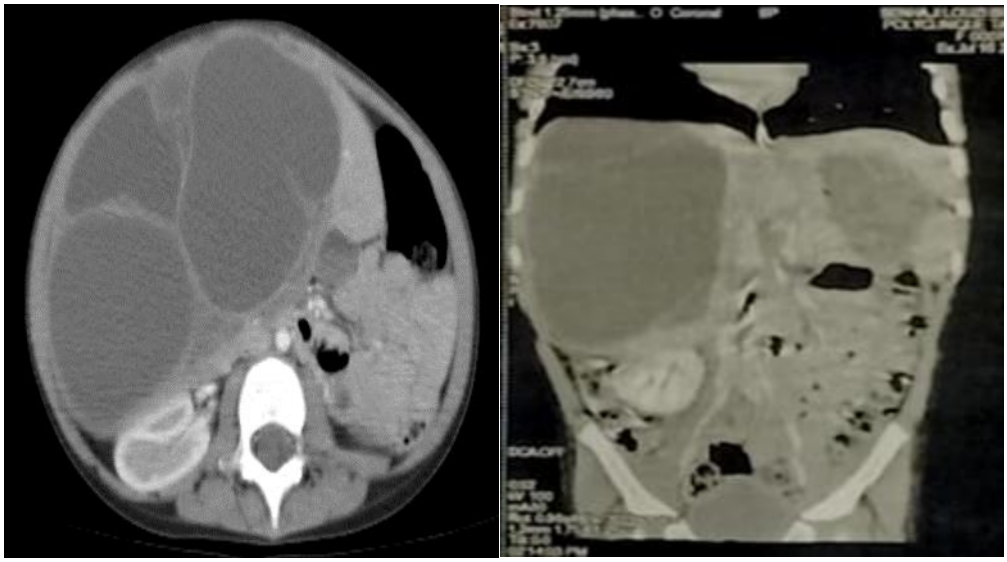

Figure 2 /3 Abdominal scan : multi-cystic mass occupying all the segments of the right liver

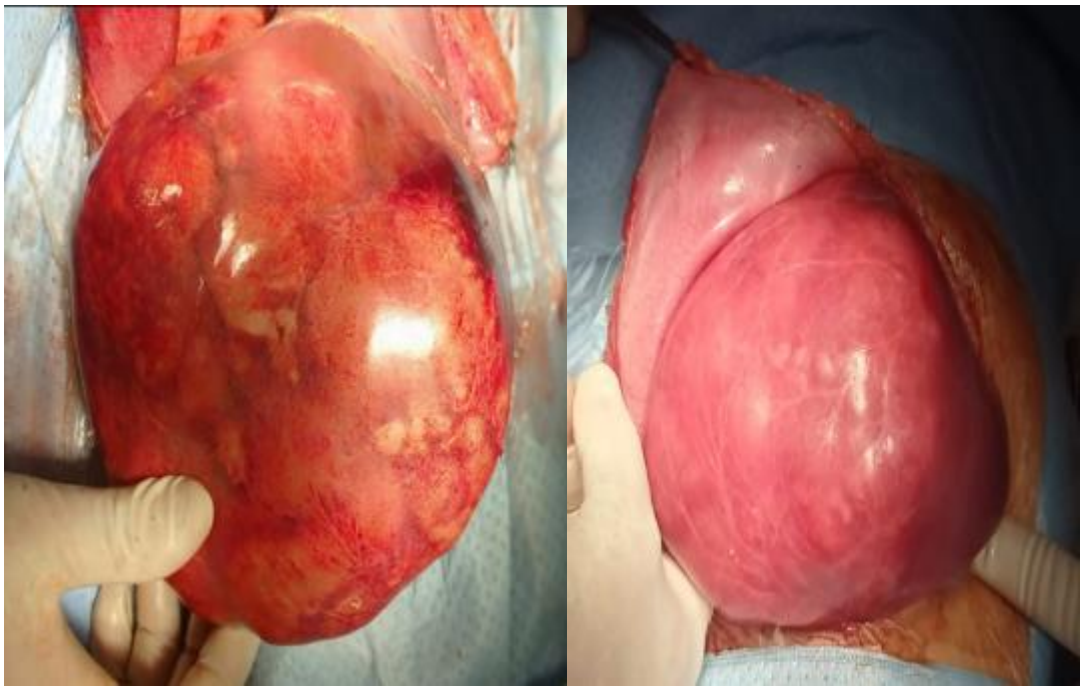

Figure 4/ 5 Total resection of the mass with right hepatectomy

4. Conclusion

Although rare and often asymptomatic, the diagnosis is suspected on clinical and radiological data and confirmed on anatomopathological data. Surgical excision is the rule.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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