Received: 8 April 2020 | Revised: 1 June 2020 | Accepted: 13 June 2020

DOI: 10.1002/ccr3.3138

CLINICAL IMAGE

Clinical Case Reports Open Access WILEY

Hepatoblastoma with multiple tumors in a school-aged child

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Abstract

Clinicians need to consider hepatoblastoma in the differential even in school-aged children or adolescents presenting with multiple liver tumors.

KEYWORDS

hepatoblastoma, multiple tumors, school-aged children

The occurrence of hepatoblastoma is infrequent in children older than 5 years of age. Clinicians need to consider hepatoblastoma in school-aged children or adolescents presenting with multiple masses in the liver.

A 10-year-old boy, who had no disease symptoms and malformations, suffered from anorexia and left hypochondrium pain for several weeks. He had a palpable stiff mass up to 5 cm below the right costal margin at the midclavicular line and tenderness in the upper abdomen. Laboratory examinations showed slightly elevated liver enzyme levels (AST/ALT = 74/38 U/L; GGT = 38 U/L) and markedly elevated serum alpha-fetoprotein level (88 000 ng/mL). Ultrasonography revealed multiple bilobar tumors occupying the left liver and the right anterior section (Figure 1). Computed tomography

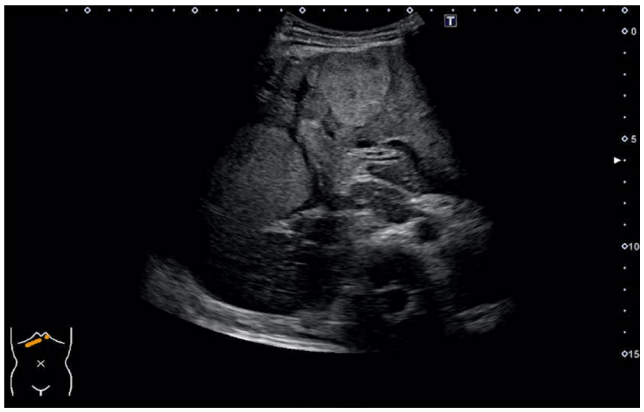

FIGURE 1 Abdominal ultrasonography showing multiple tumors in the overall left and right liver parenchyma

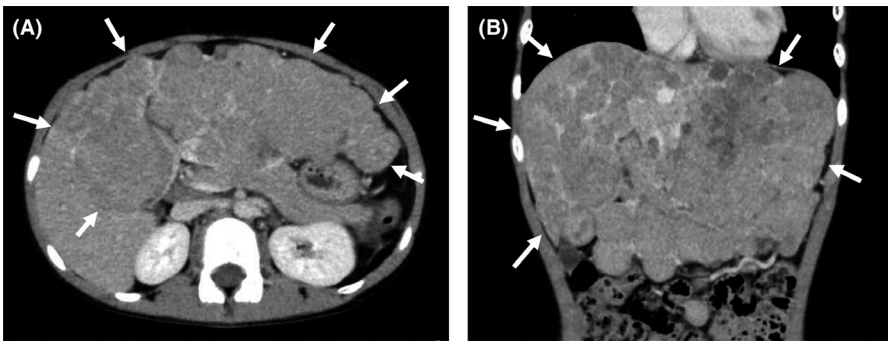

FIGURE 2 Computed tomography showing the liver with multiple tumors in axial image (A) and coronal image (B); white arrows, multiple tumors

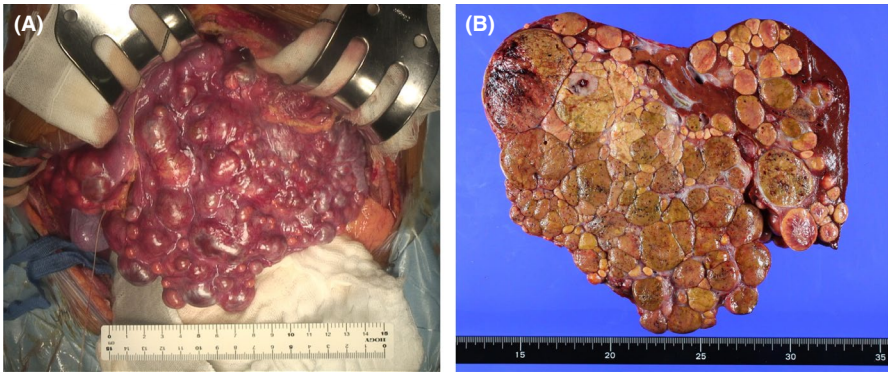

FIGURE 3 Intraoperative findings (A), and transverse cut findings through the mass in the left liver (B)

with contrast revealed that the liver contained PRE-Treatment EXTent (PRETEXT; a widely used staging system and a risk stratification and treatment planning process for cases of pediatric hepatoblastoma) III multiple tumors that were slightly enhanced in the arterial phase (Figure 2A,B). He underwent extended left hepatectomy (Figure 3A,B), and histopathology showed hepatoblastoma of the combined fetal and embryonal type. He received doxorubicin-cisplatin adjuvant chemotherapy and achieved complete remission for 10 months after chemotherapy without liver transplantation.

Hepatoblastoma is a rare primary malignant hepatic tumor that occurs during infancy and childhood, occurring predominantly in the first 2 years of life. The occurrence of hepatoblastoma is infrequent in children older than 5 years, and thus, the actual incidence could not be calculated.[1] In most cases, hepatoblastoma is present as a solitary mass.[2] Hepatoblastoma should be a consideration when the liver displays multiple tumors in school-aged children or adolescents.

ACKNOWLEDGMENT

Consent statement: Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

All authors participated in the review of the manuscript. YT: drafted the manuscript. TY, NK, SY, TA, KN, KY, SH, HY, TH, and MM read and approved the final manuscript.

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How to cite this article: Takaki Y, Yamashita T, Kataoka N, et al. Hepatoblastoma with multiple tumors in a school-aged child. *Clin Case Rep*. 2020;8:2314–2315. https://doi.org/10.1002/ccr3.3138