

## DIAGNOSIS AND TREATMENT OF PEDIATRIC HEPATOBLASTOMA

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## INTRODUCTION

Hepatoblastoma is the most common primary liver tumor in children. Most cases appear in the first two years of life, and rarely appear after the age of five. The incidence of hepatoblastoma in children has increased over the years and, therefore, it is important to know in more detail its treatment and diagnostic methods.

## METHODOLOGY

A careful literature review was carried out in which 8 articles were selected in Portuguese, English and Spanish, published between 2016-2020 using the descriptors *hepatoblastoma; pediatric; treatment;* through the Scielo, Google Scholar and Pubmed databases.

## DISCUSSION

Hepatoblastoma typically presents in children under three years of age, with an abdominal mass, anemia, and vomiting. The diagnosis of the disease is made through clinical characteristics, serum alpha-fetoprotein (AFP) levels, characteristic findings on ultrasound imaging (USG) and the child's age. Typically, a mass is found in the right lobe of the liver and, in more than 90% of cases, it is associated

with high AFP dosage. USG with Doppler shows hypervascularization in the region. In addition, a Magnetic Resonance Imaging or a Computed Tomography is performed to detect possible metastases and to better characterize the tumor. In many cases, however, a biopsy is necessary to confirm the diagnosis and to guide the therapy to be carried out. The main differential diagnoses are congenital cysts, abscesses and other neoplasms, such as hemangioma. Treatment is mainly carried out through complete surgical resection. To carry it out, the PRETEXT classification is used, which divides patients into 4 groups according to the extent and location of the tumor. Furthermore, chemotherapy can be performed in patients who are not suitable for resection, radiofrequency removal in patients with metastases, and liver transplantation.

## CONCLUSION

This summary confirms the importance of early diagnosis and specific treatment for children with hepatoblastoma, as this is a highly relevant disease, especially in children under three years of age. Therefore, further studies are necessary in order to better classify and treat patients affected by the disease.

## REFERENCES

- CHOJNIAK, Rubens. O diagnóstico das lesões hepáticas focais da infância. *Radiologia Brasileira*, 53 (3). 2020.
- GUERRERO, Raúl et. al. Tumores hepáticos en edad pediátrica. *Revista Cubana de Pediatría*, vol.92 no.3. 2020.
- DI SERAFINO, Marco et al. Paediatric liver ultrasound: a pictorial essay. *Journal of Ultrasound*, v. 23(1). 2020.
- HAFBERG, Efinar et al. Contemporary management of hepatoblastoma. *Current Opinion in Organ Transplantation*, 24(2):113-117. 2019.
- RANGANATHAN, Sarangarajan et al. Hepatoblastoma and Pediatric Hepatocellular Carcinoma: An Update. *Pediatric and Development Pathology*, 23(2):79-95, 2020.
- YEVICH, Steven et al. Reiterative Radiofrequency Ablation in the Management of Pediatric Patients with Hepatoblastoma Metastases to the Lung, Liver, or Bone. *CardioVascular and Interventional Radiology*, 42, 41– 47. 2018.
- PATEVA, Irina et al. Hepatoblastoma in an 11-year-old: Case report and a review of the literature. *Medicine (Baltimore)*, 96(2). 2017.
- GNARRA, Maria et al. History of the infantile hepatic hemangioma: From imaging to generating a differential diagnosis. *World Journal of Clinical Pediatrics*, 5(3): 273–280. 2016.