

Feasibility of empirical chemotherapy before operation in children with hepatoblastoma diagnosed by elevated serum alpha-fetoprotein

xuelian liao¹, Shayi Jiang¹, Jingwei Yang¹, Jingbo Shao², Jiangbin Liu¹, Zhibao Lv¹, Chunyu Wu¹, and Xueli Wang²

¹Shanghai Children's Hospital, Shanghai Jiao Tong University

²Children's Hospital of Shanghai

August 28, 2020

Abstract

Background To explore the feasibility of preoperative empirical chemotherapy in the clinical practice of child hepatoblastoma from the accuracy of clinical diagnosis based on elevated AFP and the effect of preoperative empirical chemotherapy on treatment results. **Procedures** Firstly, a retrospective analysis was made on clinical data of 80 children with primary hepatic space-occupying lesions admitted to a single center in the past 5 years, including 50 cases of hepatoblastoma and 30 cases of non-hepatoblastoma. Statistical way was used to analyze the sensitivity and accuracy of differentiating child hepatoblastoma from other liver space occupying lesions based on elevated serum alpha-fetoprotein (AFP). Secondly, among the 50 children with hepatoblastoma, those who had pathological evidence before chemotherapy were classified as the pathological treatment group, and those who started chemotherapy according to the clinical diagnosis of hepatoblastoma based on the elevated AFP were assigned to the empirical chemotherapy group. The survival of the two groups and distribution of pathological types of the two groups were statistically analyzed. **Results** According to the elevation of serum AFP, the liver primary occupying lesions in children was clinically determined as hepatoblastoma. The sensitivity and specificity were 98% and 100%. There was no significant difference in overall survival (OS) and event-free survival (EFS) between pathological treatment group and the empirical chemotherapy group by the Log-rank test. **Conclusion** The diagnosis of hepatoblastoma based on the elevated serum AFP can be used to guide the preoperative empirical chemotherapy in children with poor surgical tolerance and to minimize the risk of treatment.

Hosted file

text.doc available at <https://authorea.com/users/354052/articles/477726-feasibility-of-empirical-chemotherapy-before-operation-in-children-with-hepatoblastoma-diagnosed-by-elevated-serum-alpha-fetoprotein>

Hosted file

Table1.doc available at <https://authorea.com/users/354052/articles/477726-feasibility-of-empirical-chemotherapy-before-operation-in-children-with-hepatoblastoma-diagnosed-by-elevated-serum-alpha-fetoprotein>

