

Comparison of Cisplatin monotherapy and PLADO in the management in children with standard-risk hepatoblastoma in a Resource Challenged Nation.

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Abstract

Background: Recent SIOPEL studies have shown cisplatin monotherapy to be equally effective in management of Standard risk Hepatoblastoma (SRHB) as compared to PLADO. Aim: To study the chemotherapy, response and outcomes in children with SRHB in a Resource Challenged Nation (RCN). Material and Methods: A retrospective study was conducted and all children with SRHB who were treated by us from June 2007 to December 2017 were included. All patients with standard risk hepatoblastoma who had received at least 2 courses of chemotherapy were included. Data regarding the demographics, PRETEXT stage, chemotherapy, response to chemotherapy and outcomes were recorded. Kaplan Meier survival analysis was performed to calculate 5-year overall survival (OS) and event free survival (EFS). Results: Thirty-two children were included in the study. Nineteen children (59.4%) received Cisplatin monotherapy and of these 6 patients (all PRETEXT III) had poor response and were upgraded to PLADO. The remaining 13 (40.6%) received upfront PLADO. The 5-year OS and EFS was 100% in the monotherapy group (n=13), 92% and 69% in the upfront PLADO group (n=13), and 62% and 22% in the upgraded to PLADO group (n=6). Patients in upgraded to PLADO group had significantly lower 5-year EFS (70% vs 22%; p= 0.036) compared to upfront PLADO group. Conclusion: Two thirds of SRHB patients with PRETEXT stage III who received cisplatin monotherapy showed poor response and were upgraded to PLADO chemotherapy. These patients had a significantly poorer outcome compared to the rest of the cohort. PRETEXT stage III standard-risk hepatoblastoma may benefit from PLADO chemotherapy instead of cisplatin monotherapy.

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