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abstract

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abstract

Experience Of Managing Infantile High Grade Glioma at A Public-Sector Specialty Hospital In A Low-Middle-Income Country

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Introduction: High grade glioma(HGG) constitutes about 15% of all pediatric brain tumors. These tumors are very aggressive resulting in poor prognosis. Survival rates of pediatric high- grade gliomas(pHGG) range from 15 to 35%. Within this group 10-12% tumors occur in children less than five years age. This subgroup is called infantile high grade glioma(iHG). This group has better prognosis and survival rates are around 60 to 70%. This is the very first study conducted on management of iHG done at a Public sector hospital in our country. The objective of the study is to share single center experience on management of iHG in resource limited setting in low middle income country(LMIC).

Methodology: Compiled data of cases of iHG in a retrospective manner diagnosed between 2021-2024 at Pediatric Hematology Oncology department of The children's hospital,University of child health sciences,Lahore Pakistan. All five patients after surgical resection, and histopathologic confirmation, without molecular correlation, treated according to Baby POG protocol.

Results: Most common presenting symptoms was hemiparesis (80%). Median duration of symptoms was 1.5momths(1-6months). Median age at presentation was 2.5years(1-3years). Male predominance with male-to-female ratio of 3:2.

Commonest site of occurrence was cerebral hemisphere(80%) with predominance in parietal lobe(60%). One case of midline iHG was reported. Overall survival rate(OS) was 80%. Only one patient expired due to pregression of primary tumor.

Conclusion: Despite a limited-resource setting of LMIC , iHG treated with surgical resection and adjuvant chemotherapy demonstrated similar outcome as reported in literature, and infants tolerated chemotherapy well. Regarding diagnosis of iHG in resource limited settings with lack of molecular analysis facility, basic morphology and immunohistochemistery can be reliably used.

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