**Title : High Grade Gliomas: Newer Horizon-New Hope**

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## Asbstract :

Abstract: Objective: Malignant Gliomas are the most aggressive cancers producing severe and progressive disability,usually leading to death. The standard treatment consists of Cytoreductive Surgery followed by Radiotherapy and Concurrent Temozolomide and Adjuvant Temozolomide. Optimizing the adjuvant chemotherapy regime is one potential strategy for improving survival and Quality of life Methods: In this study, 40 diagnosed patients of high grade gliomas,who underwent resection, received concurrent chemoradiation and adjuvant chemotherapy were analysed. [25 pt's- Anaplastic Astrocytoma (Gr III) ,13 pt's- Glioblastoma Multiforme (GBM) & 2 ptsGliosarcoma]. Patients received concurrent Temozolomide 75 mg/m2 daily for 42 days. Weekly Hematological and Biochemical investigations were done. 4 weeks after chemo-irradiation, patients received Adjuvant Temozolomide-150 mg/m2 days 1 to7 and days 15 to 21 for every 28 days for 6 cycles. Investigations were done every 2weeks (Hematological and Biochemical parameters were assessed). Response rate, survival outcome, recurrence rates & toxicities were analyzed. The response was assessed with CT/MRI every 3 monthly from the time of completion of treatment. Results: The overall survival in high grade glioma was 38.3 months. In Anaplastic astrocytoma (Gr III), maximum survival was 44 months and in Glioblastoma multiforme it was 26.6 months. The survival between the grades is significant with 'p' value of 0.001, significant better 2year OS was seen in AA (Gr III). There were 10 deaths due to disease progression, out of which 8 cases were GBM and 2 cases were AA (Gr III). 18 pt's developed Gr-III Thrombocytopenia and 16 patients had Leukopenia (Gr I-II).None of the patients developed Gr-IV hematological toxicities. Nausea and vomiting (Grade 1-2) was seen in 80% of the patients. Conclusion: Dose dense regimen has a role in terms of efficacy than the adjuvant treatment of standard dose of 200 mg/m2 days 1 to 5 for every 28 days cycle for 6 months. The toxicity is increased with majority being Grade I, II leucopenia and Grade III Thrombocytopenia