

International Conference on

PUBLIC HEALTH, PSYCHIATRY AND NEURO-ONCOLOGY

August 14-15, 2019 | Tokyo, Japan

Antiemetic prophylaxis for Temozolomide: Monotherapy vs. combination?**Mridul Malhotra**

Tata Memorial Hospital, India

Temozolomide $>75\text{mg}/\text{m}^2$ has moderate emetogenic potential and 5HT₃ antagonist monotherapy is recommended as antiemetic prophylaxis. However international guidelines recommend multi-drug combinations for intravenous chemotherapy of moderate emetogenicity. Antiemetic prophylaxis for oral chemotherapeutic agents is not well defined. Further Temozolomide has potential for causing delayed emesis. We compared 5HT₃ antagonist monotherapy with combination regimens for Temozolomide CINV prophylaxis. We maintain a prospective chemotherapy database of patients diagnosed with central nervous system tumors. Patients included in study were receiving adjuvant Temozolomide for gliomas from October 2017 to June 2018. Antiemetic prophylaxis was administered for five days along with Temozolomide (150-200mg/m²) under three subsets: Ondansetron 8 mg BD, Ondansetron 8 mg BD + Domperidone 10mg BD and Ondansetron 8mg BD + Olanzapine 5mg BD. CINV (graded as per CTCAE 4.03) was defined as either nausea or vomiting occurring within 120 hours of last dose of TMZ. Statistical analysis was performed using SPSS version 20 and R Studio version 1.1.456. The CINV: Nausea, vomiting were compared using Chi-square test with Bonferroni correction. A p-value of below 0.025 was considered significant. 360 patients were selected with 91 (25.3%), 113 (31.4%) and 156 (43.3%) patients in Ondansetron, Ondansetron + Domperidone and Ondansetron + Olanzapine group respectively. The overall incidence of CINV, nausea and vomiting was 25.0% (n=90), 25.0% (n=90) and 7.2% (n=26) respectively. The incidence of \geq Grade-2 nausea [17 (18.7%), 13 (11.5%) and 10 (6.4%) p:0.012] and \geq Grade-2 vomiting [5 (5.5%), 5 (5.3%) and 0; p:0.015] was reduced with combination antiemetic regimes which was statistically significant. The CINV rates with Temozolomide are high with Ondansetron monotherapy. The combination of Ondansetron with olanzapine leads to statistically significant decrease in the rate of moderate to severe emesis and nausea and offers a cost effective steroid sparing antiemetic regimen.

mmdoc.85@gmail.com