

## **ABSTRACT**

### **BACKGROUND:**

The incidence of postoperative nausea and vomiting (PONV) after middle ear surgery is 30 to 40 % and higher in high risk individuals. In this study we want to compare the antiemetic effects and efficacy of three groups of drugs, intravenous Ramosetron with Dexamethasone, Ondansetron with Dexamethasone and Metoclopramide with Dexamethasone as a prophylactic administered before surgery in patients undergoing middle ear surgeries.

### **MATERIALS AND METHODS:**

We enrolled 120 patients that were randomly divided into four groups of 30 in each. Group I received 2ml distilled water with Dexamethasone IV 8mg one hour before end of surgery ;

Group II received Ramosetron 0.3mg with Dexamethasone 8mg IV given one hour before end of surgery.

Group III received Ondansetron 4mg with Dexamethasone 8mg IV given one hour before end of surgery

Group IV received Metoclopramide 10mg with Dexamethasone 8mg IV given one hour before end of surgery

Incidence and severity of PONV were recorded in each group for 24 hours in the post-anesthesia care unit (PACU). The duration after which the rescue antiemetic was given was also recorded for each group. Dose of Rescue antiemetic drug usage also noted. The severity of pain intensity was assessed by visual analogue scale (VAS) after repeated intervals. The side effects of the study drug like headache, dizziness, allergic reaction etc., if any were assessed and recorded.

### **RESULT:**

The incidence of nausea is least in first few hours (6 hours) in group R+D compared to other groups. Incidence of nausea and vomiting at different time intervals in Groups R+D and Group O+D were remains same and not statistically significant. There was no significant difference in the incidence of side effects like respiratory depression, headache, extra pyramidal disorders, drowsiness, dizziness, vertigo and allergic in all the groups. Need of Rescue antiemetic need was substantially reduced in R+D and O+D group.

### **Key Words:**

5HT<sub>3</sub> receptors, Ramosetron, Ondansetron, Metoclopramide, post operating nausea and vomiting (PONV), Efficacy