

## Effect of Pretreatment with Diphenhydramine on Recovery Complications in Minor Ear, Nose and Throat Surgeries: A Randomized Clinical Trial

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### ABSTRACT

**Objective:** Pain after surgery is one of the risk factors of postoperative nausea and vomiting (PONV) and increased recovery complications due to the mechanisms it causes. Histamine blockers with their effects (sedation, reduction of pain and anxiety) may lead to reduction of recovery complications; Therefore, the present study was conducted with the aim of the effect of pretreatment with diphenhydramine on recovery complications in minor ear, nose, and throat surgeries.

**Materials and Methods:** 100 patients' candidates for minor ENT surgeries were included in this double-blind randomized clinical trial study as available sampling. Ten minutes before the induction of anesthesia, 2 cc of diphenhydramine (25 mg) were injected into the patients of the intervention group and 2 cc of normal saline were injected into the patients of the control group; Pain intensity and PONV in recovery and 2, 4, 8, 10, 12, 24 hours after discharge from recovery were compared between two groups using Independent-Samples T-Test.

**Results:** In recovery, the incidence of nausea and vomiting ( $p=0.02$ ) and the need for ondansetron in the diphenhydramine group were significantly lower than the control group ( $p=0.05$ ). On the other hand, the incidence of nausea and vomiting in the 24-hour evaluation was significantly lower in the diphenhydramine group than in the control group; The average total injected ondansetron during 24 hours in the intervention group ( $4.41\pm 0.17$ ) was significantly ( $P=0.031$ ) lower than the control group ( $9.37\pm 1.41$ ).

**Conclusion:** Prophylactic injection of diphenhydramine leads to reduction of recovery complications (short term) after anesthesia in limited ENT surgeries.

**Keywords:** Diphenhydramine, Nausea and Vomiting, Pain, Recovery, ENT

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