Abstract

**Background:** One of the prophylactic methods in avoiding postoperative nausea and vomiting (PONV) is the application of intraoperative supplemental oxygen which was shown to have a protective effect in some studies yet a matter of controversy among different researchers.

**Objective:** To study the effect of postoperative oxygen therapy on PONV.

**Methods:** This quasi-experimental study was performed on 106 eligible patients subjected to elective cesarean section in 2003. The patients were randomly assigned into two groups. Anesthesia and drugs in intraoperative and postoperative periods were the same in two groups.

In intraoperative period all patients inhaled 50% oxygen balanced with N₂O. One group received 60% oxygen in postoperative period (study group), and a second group received routine care of 30-40 percent oxygen in recovery room and no oxygen on surgical ward (control group). SPO₂ and PONV were recorded in recovery and surgical ward.

**Findings:** PONV was 28.3% and 24.5% in study and control groups, respectively. There was no significant difference between two groups.

**Conclusion:** Our study suggests that postoperative application of 60% oxygen was no value to produce preventive effect on PONV in patients undergoing cesarean section.

**Keywords:** Vomiting, Nausea, Cesarean Section, Oxygen Therapy, Surgery