26298 - THE EFFECT OF SUBHYPNOTIC DOSES OF PROPOFOL ON THE INCIDENCE OF VOMITING IN CHILDREN UNDERGOING STRABISMUS REPAIR.

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Introduction: Strabismus repair is one of the most common surgical procedures performed in children. It is associated with a high incidence of nausea and vomiting, which can be as high as 80% in the untreated patient population (1). This high incidence can be and is considered an indication for the prophylactic use of anti emetics. Adult studies suggest that propofol can have antiemetic properties (2,3). Limited data are available on the effect of propofol on the incidence of vomiting in children undergoing surgical procedures. The aim of this study was to evaluate the effect of adding sub-hypnotic doses of propofol, at the end of surgery, on the incidence of vomiting in children undergoing strabismus repair.

Methods: After ethics committee approval we evaluated the effect of adding sub-hypnotic doses of propofol in children, 3 to 10 years of age, ASA I-II, undergoing strabismus repair. Anesthesia was induced with sevoflurane/N₂O/O₂ and maintained with isoflurane/N₂O/O₂. Intravenous ketorolac (1 mg/kg), ondansetron (50 mcg/kg), and dexamethasone (150 mcg/kg) were given to all children after induction of anesthesia and before the start of surgery. Children were kept spontaneously breathing with an LMA. Children in Group I (propofol group) were given 0.5 mg/kg of propofol 5 min. before the end of surgery. Children in Group II (placebo group) were given saline and served as a control group. Patients demographic data, pain, nausea and vomiting, and other side effect were recorded.

Results: Eighty-four children completed the study. Follow-up was lost in 3 children in group I and in 4 children in group II. The incidence of vomiting within the first 24 hours was relatively low in both groups. Vomiting was recorded in only 1 of 38 in Group I (2.4%) and 1 of 39 in Group II (2.3%). The child in Group I vomited 3 hr after surgery and the child in Group II vomited the day after surgery. There were no statistically significant differences in the incidence of adverse effects or post-operative medication use between the two groups.

Discussion: The routine use of potent antiemetics results in a drastic decrease in the incidence of nausea and vomiting in children undergoing strabismus surgery. The addition of subhypnotic doses of propofol at the end of the surgical procedure was not effective in eliminating the risk of vomiting and is not indicated when the incidence of post-operative vomiting is small

References: 1- Anesthesiology 1992; 76: 357-61.

2- Arch Otolaryngol Head Neck Surgery 2001; 127: 25-8.

3- J Oral Maxillofac Surg 2002; 60: 1246-9. Anaesthesist.