

Title: Audit of Post-operative Nausea and Vomiting in children following adenotonsillectomy.

Author(s): Khan J A, Kumar K, Franklin B

Affiliation(s): Department of Anaesthetics & Intensive care, Altnagelvin Area Hospital, Londonderry BT48 7NR, United Kingdom

ABSTRACT BODY:

Introduction: The incidence of post-operative nausea and vomiting (PONV) is about 13-42% in paediatric population. Prevention of PONV is important because it causes significant parental dissatisfaction, unanticipated hospital admission and increased health care costs (1).

Aim: To evaluate the degree of compliance with the guidelines mentioned by Association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI) and to find out the relation between the anaesthetic practice and the incidence of PONV in children.

Methods: This is a prospective audit involving 57 children undergoing tonsillectomy, adenoidectomy and adenotonsillectomy over a period of 6 months. The data collected for each patient includes type of procedure, history of previous general anaesthetic and relevant history of PONV, agents used for induction and maintenance of anaesthesia, intra-operative and post-operative analgesics used, intra-operative anti-emetics used, any prophylactic post-operative anti-emetics prescribed or not, episodes of post-operative vomiting, duration between induction and post-operative vomiting (early PONV<6 hours, late PONV>6 hours), need for administration of intravenous fluids in the post-operative period and any delayed discharge due to PONV.

Results: Out of the 57 children, 65% had Tonsillectomy alone, 25% had adenotonsillectomy and 10% vent insertion. 9% had a previous history of general anaesthetic that was uneventful. Intra-operative anti-emetics were given to 96% of the children, 47% had ondansetron and 49% had a combination of ondansetron and dexamethasone. Post-operatively, only 16% had a rescue anti-emetic prescription. A total of 8 out of the 57 children had PONV (14%) and among them 75% were female and 25% male. In 75% nitrous oxide was used intra-operatively. Out of the 14% of children who had PONV, 87% received morphine intra-operatively and 13% had paracetamol. All the children who had PONV received either ondansetron (63.5%) or a combination of ondansetron and dexamethasone (37.5%) intra-operatively. 63% of the children had late PONV. There was no delayed discharge and none required intravenous fluids post-operatively.

Discussion: According to the APAGBI guidelines, children with past history of PONV and those scheduled for adenotonsillectomy are to be considered as high risk for PONV and should receive prophylactic anti-emetics intra-operatively. A combination of ondansetron and dexamethasone should be considered in children with high risk of PONV (2). In our audit only 50% of children received a combination of ondansetron and dexamethasone intra-operatively. The incidence of PONV was higher in children who received intra-operative morphine.

References:

1. J Clin Anesth 1998; 10:482-487
2. Paediatric Anaesthesia 2001; 11(5): 591- 595