Paediatric Postoperative Vomiting is Reduced with Alimemazine

Premedication with papaveretum + scopolamine is associated with a very high rate of vomiting

Alimemazine was found to reduce the incidence of vomiting in children after ENT surgery, even when an intraoperative opiate was administered. Patients ≤ 18 years undergoing ENT surgery received as premedication IM papaveretum + scopolamine [hyoscine] (n = 415), oral alimemazine (100), oral diazepam (26) or no medication (34). An opiate (usually papaveretum) was administered IM intraoperatively to 51 alimemazine recipients, 16 diazepam recipients and to 3 children who received no premedication.

Vomiting was seen in 61% of patients; 24% experienced mild vomiting and 37% suffered severe vomiting. In patients undergoing adenotonsillectomy (n = 393) and minor ear surgery (123)), 68 and 44%, respectively, vomited. 12.5% of all alimemazine recipients vomited, compared with 70% of papaveretum + scopolamine recipients (p < 0.001). The difference was also significant in adenotonsillectomy and minor ear surgery patient subgroups. Alimemazine plus an intraoperative opiate resulted in significantly less vomiting than papaveretum + scopolamine in all patients (43%) and in the adenotonsillectomy subgroup (46%). Diazepam alone was associated with a 60% rate of vomiting, while all patients receiving diazepam + an intraoperative opiate vomited (significant vs papaveretum + scopolamine recipients). Those receiving no premedication experienced significantly less vomiting but this was not maintained when an intraoperative opiate was added.

The authors concluded that the high incidence of vomiting was a major disadvantage of papaveretum + scopolamine. Alimemazine is a logical premedicant when opiates are also used.

Puttick N, Van der Walt JH. Anaesthesia and Intensive Care 15: 158-162, May 1987