

# Alimemazine Surpasses Diazepam as Paediatric Premedication

## More children are satisfactorily sedated before surgery and have better postoperative state

Two hours prior to undergoing adenotonsillectomy ( $n = 77$ ) or inguinal surgery ( $66$ ), children randomly received in double-blind fashion oral alimemazine  $4 \text{ mg/kg}$  ( $n = 39$ ), alimemazine  $4 \text{ mg/kg} + \text{droperidol } 0.2 \text{ mg/kg}$  ( $32$ ), diazepam  $0.25 \text{ mg/kg}$  ( $34$ ) or diazepam  $0.25 \text{ mg/kg} + \text{droperidol } 0.2 \text{ mg/kg}$  ( $38$ ). The children were aged 1-10 years and weighed 10-30kg. Anaesthesia was achieved by halothane induction ( $n = 81$ ) or IV thiopentone ( $62$ ). All patients received papaveretum  $0.3 \text{ mg/kg}$  IM during surgery and paracetamol as a postoperative analgesic.

Alimemazine alone or in combination with droperidol achieved a satisfactory preoperative sedation state in 89% of patients (vs 74% for diazepam;  $p < 0.001$ ). Reaction to anaesthetic induction was satisfactory in 95% of patients receiving alimemazine alone or combined with droperidol (vs 65% for diazepam;  $p < 0.001$ ). Postoperative sedation was determined as satisfactory in 72% of patients receiving alimemazine alone or in combination with droperidol (vs 29% for diazepam;  $p < 0.001$ ). Time to waking following alimemazine + droperidol was 38 min vs 26 min for alimemazine alone ( $p < 0.05$ ), 23 min for diazepam + droperidol ( $p < 0.001$ ) and 20 min for diazepam alone ( $p < 0.001$ ). Postoperative pain was present in 24% of patients receiving alimemazine alone or in combination with droperidol (vs 44% for diazepam;  $p < 0.01$ ). 76% of patients receiving diazepam alone vomited after surgery while 52% receiving diazepam + droperidol vomited. 25% of patients receiving alimemazine alone vomited while 6% of patients receiving alimemazine + droperidol vomited ( $p < 0.001$  for alimemazine vs diazepam).

The authors concluded that alimemazine  $4 \text{ mg/kg}$  administered alone ***'... is a satisfactory oral premedication for adenotonsillectomy and inguinal surgery in children when compared with diazepam in a dose of  $0.25 \text{ mg/kg}$ '***. Furthermore, an intraoperative analgesic should also be administered to optimise the postoperative outcome.

Van Der Walt JH, Nicholls B, Bentley M, Tomkins DD. *Anaesthesia and Intensive Care* 15: 151-157, May 1987