Comparison of the Effectiveness between Ketamine Hydrochloride and Chloral Hydrate for Oral Premedication in Pediatric Patients.

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Chloral hydrate is widely used as a convenient, orally administered premedication in children. Its use in clinical practice associates with some problems of excessive sedation and agitation. There are reports using ketamine hydrochloride for oral premedication and claimed to be effective. This study compared the efficacy between the two drugs for oral premedication in pediatric patients.

The double-blind randomized control study was done in 120 patients aged 6 months-7 years, ASA status I-II, scheduled for elective surgery. The patients were randomly allocated into 2 groups. Group I (N = 60) were given chloral hydrate (50 mg/kg) and group II (N = 60) were given ketamine

(6mg/kg). The effectiveness was assessed by the evaluation scales consisting of sedation, emotional state, secretion scales and acceptability to face mask. We also took note of the side effects and complications of both drugs.

The success rate in ketamine group was significantly higher than the chloral hydrate group for sedation scale (p<0.05). There were no significant different between 2 groups for emotional state, secretion scales and acceptability to face mask (p>0.05).

In conclusion, ketamine hydrochloride can be used for oral premedication in pediatric patients more effectively than chloral hydrate for sedation.

Key words: Anesthesia: pediatric

Premedication: chloral hydrate, ketamine.