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IS THERE STILL A PLACE FOR CHLORAL HYDRATE SYRUP IN HOSPITAL?

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BACKGROUND

Sedation is frequently essential for successful Magnetic Resonance Imaging (MRI) for infant and children patients. Chloral hydrate syrup (CHS) remains the only product used orally for this purpose in the Specialty Hospital, Ibn Sina University Hospital of Rabat, Morocco.

PURPOSE

This study evaluates the use and economic interest of the CHS administration for sedation in infants and children undergoing MRI in our hospital

MATERIAL AND METHODS

Prospective study included 30 infants and children, 8 to 48 months old (mean, 20.71± 13.42 months), who were given oral chloral hydrate, 50 mg/kg, for sedation before MRI. The study was limited to children who weighed 25 kg or less. Sedation was considered successful when MRI studies were completed and at least 95% of the images had few or no motion artifact

RESULTATS

The overall length of time to achieve sedation was ranged from 8 to 30 min (13.5±11.33min); the overall mean duration of sedation was ranged from 10 to 45 min (29.5±5.02min); and the overall mean length of time to return to normal activity was 30 min to 3h (47.3±16.2min). Other studies reported that Chloral hydrate was more effective than Midazolam in facilitating completion of painless imaging studies, although it has a longer onset and duration, and reported minimal adverse events (The only side effect observed was vomiting in 15% of children) [1-2]. The pharmaco-economic side, the hospital preparation of the CHS 5% in a bottle of 100ml costs € 1.85. The direct cost to prepare the sedation is € 0.37 for each child of 20 kg versus € 1.24 for sedation child the same weight by Midazolam.

CONCLUSION

The low adverse events for CHS, and the much lower cost for its use to induce sedation a short-time have made CHS our preference for sedation in infants and children undergoing MRI in our hospital.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest