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ANAESTHETIC TECHNIQUE FOR PAEDIATRIC TONSILLECTOMY- A NATIONAL SURVEY

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- **Introduction and aims**

Paediatric tonsillectomy for obstructive sleep apnoea (OSA) is a common procedure, but associated with an increased risk of postoperative respiratory complications, nausea and vomiting (PONV), pain, and emergence delirium.

Getting it Right First Time is a national programme that aims to increase the day-case rate for paediatric tonsillectomy to 80%. Data from this survey can better inform us of the variations in anaesthetic practice and help guide the development of local protocols.

- **Methods**

A survey relating to a hypothetical clinical scenario was administered to delegates at the Association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI) Annual Scientific Meeting 2022 and APAGBI members via email:

You have a 3 year old, 13kg, female with tonsillar hypertrophy for an elective tonsillectomy as the first case on your list. She is known to snore at night but has no episodes of apnoea, daytime somnolence or change in behaviour when tired, and has been diagnosed with mild OSA. She has no other outstanding medical issues. She is cooperative during the pre-operative assessment on the ward.

Participants were allowed to give multiple answers to one question.

- **Results**

148 people responded to the survey, with 62% of them anaesthetizing a paediatric ENT list on more than a monthly basis. 93% of respondents were consultant anaesthetists, with 42% having a mixed adult and paediatric practice.

Only 9% opted for a premedication, with the most common choice being midazolam (59%). The majority opted for an intravenous induction (81%) and will avoid using a neuromuscular blocker (75%). 70% of respondents will use a cuffed endotracheal tube (ETT). 85% of respondents chose inhalational anaesthesia as their maintenance. Popular intraoperative analgesia include paracetamol (92%), NSAIDS (84%), fentanyl (58%) and morphine (53%). Other adjuvants mentioned include

dexamethasone (93%), ondansetron (89%) and α-2 agonists (25%). 62% chose a deep extubation technique. 96% will discharge patients with paracetamol, and 95% with NSAIDS. Only 43% will discharge patients with morphine. 80% of respondents work in an institution with discharge criteria for paediatric patients undergoing day-case tonsillectomies, with 59% being ≥6 hours.

- **Discussion and conclusion**

In this hypothetical scenario, most respondents chose an intravenous induction, which is postulated to reduce the incidence of emergence delirium. Tonsillectomies can potentially be shorter than the duration of action of neuromuscular blockers, hence the decision to avoid their use in most respondents. The popularity of cuffed ETTs reflects its growing trend in paediatric patients.

Most respondents recognize the importance of multimodal analgesia and PONV prophylaxis. The majority elected for a deep extubation despite the risk of airway obstruction. The choice of discharge medications reflects knowledge of the postoperative respiratory complication risk in these patients.

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