

Cuffed or uncuffed tracheal tubes in paediatric anaesthesia: A survey of current practice in the United Kingdom and The Netherlands

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Introduction and aims

In recent years opinion in literature has shifted in favour of cuffed endotracheal tubes (CTT)¹. To evaluate if this shift has led to a change in clinical practice, we carried out a survey amongst paediatric anaesthesiologists from the United Kingdom (UK) and the Netherlands. We compared practice between UK and The Netherlands regarding the use of CTTs in different age-groups, factors influencing the choice in tube type and monitoring of cuff pressure.

Methods

An online survey was sent to all members of the Association of Paediatric Anaesthetists of Great Britain and Ireland and all members of the Dutch Society of Pediatric Anesthesia between March and July 2012.

Results

A total of 262 British (31%) and 115 Dutch (49%) anesthesiologists filled out the survey. In infants, 53.8% of British versus 24.3% of Dutch anesthesiologists never use CTTs. With increasing age, anaesthesiologists tend to use CTTs more regularly, Dutch more so than British. In children 5-8 years old 20.4% of British versus 1.8% of Dutch anesthesiologists never use CTTs. The main reasons for not using a CTT are unavailability of small size CTTs, concern of tracheal injury and a smaller internal diameter of the CTT. Reasons for choosing a CTT are the child's age, type of surgery and severe gastro-oesophageal reflux disease. Cuff pressure is never measured by 68.8% of British anaesthesiologists and 2.9% of Dutch anaesthesiologists.

Discussion and conclusion

Despite evidence in literature, CTTs are still commonly used in children. In all age-groups, fewer British anaesthesiologists use CTTs as compared to their Dutch counterparts, suggesting a more traditional opinion towards cuffed tube use in the UK. This survey does show continuing concerns about cuffed tubes amongst both British and Dutch anesthesiologists. The difference in measurement of cuff pressure between British and Dutch anaesthesiologists is striking, with the majority of British anaesthesiologists never measuring it even though high cuff pressure has been shown to be the most important predictor of postoperative sore throat².

References

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