

Unplanned surgery in paediatric patients during the COVID-19 pandemic

A positive experience

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Background

Theatre is a high-risk environment that may potentiate the transmission of COVID-19 between patients and healthcare workers.¹ This may be problematic when dealing with paediatric patients who are more likely to require general anaesthesia (GA) exposing themselves and staff to aerosol generating procedures (AGPs).^{1,2} However, national and local measures that have transformed our practice to ensure safety of patients and staff may inadvertently create an environment that can be intimidating for children.

Aims and Objectives

The purpose of this project was to evaluate service delivery during the COVID-19 pandemic for paediatric patients undergoing urgent procedures.

Aims:

- to determine what impact changes in practice would have on patients and parents
- to identify areas of improvement in adaptations made and care delivered
- to determine whether local and regional anaesthesia are acceptable alternatives for procedures in paediatric patients that can help minimise exposure to AGPs.

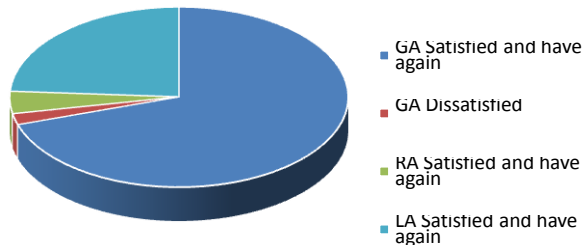
Methods

Parents of paediatric patients who were admitted to our specialist hospital for urgent surgery were requested to complete a questionnaire on behalf of their child prior to discharge regarding their perioperative experience during the COVID-19 pandemic. We conducted this survey from July 2020 through to September 2020.

Results

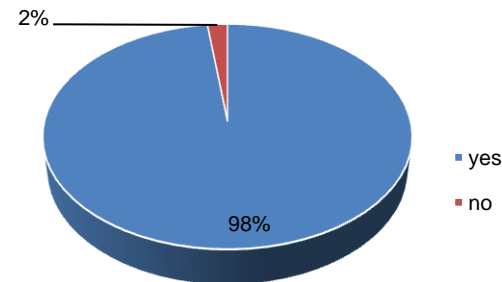
During the 2-month period, 50 patients and their parents submitted questionnaires.
The age range of children surveyed was <1 year - 16 years old. 68% of patients were under 10 years old.
52% of cases involved plastic surgery and 48% were maxillofacial cases.
When asked about concerns coming to hospital, apprehension about the anaesthesia and surgery were highlighted with 30% of respondents expressing concerns.

Type of Anaesthesia with satisfaction



72% of patients had GA of which 55% were gas inductions. 24% had local anaesthesia (of which 50% <10 yrs) 4% had regional anaesthesia.
Satisfaction rates for local and regional anaesthesia techniques were 100%.
Satisfaction rates for general anaesthesia were 97%.
92% did not find PPE intimidating.
98% felt safe from COVID-19 during their hospital stay.
Overall satisfaction of perioperative experience was 98%.

Felt safe from coronavirus



Conclusion

Results suggest our paediatric anaesthesia services have met the expectations of patients and their carers whilst adapting service delivery in order to maintain appropriate coronavirus protection. High satisfaction from local and regional anaesthesia suggest these techniques may be effective alternatives that can be safely performed on awake paediatric patients and help reduce airborne exposure and risks associated with GA. We noted a high proportion of patients/parents expressing anxiety about the procedure which we are addressing by offering better pre-operative information in advance of hospital admission.

References:

1. Dedeilia A, Esagian SM, Ziogas IA, Giannis D et al. Paediatric surgery during the Covid-19 pandemic. *World Journal of Clinical Pediatrics*, 2020; 9(2): 7-16.
2. Lee-Archer P, von Ungern-Sternberg BS. Paediatric anaesthetic implications of COVID-19—A review of current literature. *Pediatric Anaesthesia*, 2020; 30(6): 136-141.