STANDARDISING ANAESTHESIA FOR PAEDIATRIC DENTAL SURGERY

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INTRODUCTION AND AIMS

- 1/3 of 3-5 year olds in the UK have dental caries.
- Dental GAs cost the NHS £350 million per year.
- The Royal College of Anaesthetists (RCoA) have produced guidelines for the management of children having dental extractions under GA.
- We reviewed the anaesthetic practice at the Queens Medical Centre, Nottingham against the RCoA recommendations for:
 - simple analgesia
 - avoidance of opiates
 - standards for discharge.

METHODS

• The provision of general anaesthesia for all

RESULTS

- 41 patients were included (ages 2 10).
- All had extractions (max. 13)
- 9 also had fillings (max 7).
- Preoperatively, 83% of patients had paracetamol and 90% had ibuprofen.
- Intraoperatively 6 had IV fentanyl.
- 68% had IV antiemetics in theatre 12% received 2 antiemetics.
- Antiemetics were never required in recovery, with no reported nausea or vomiting.
- 34/41 were pain free in recovery all had paracetamol and ibuprofen preoperatively.
- 7 patients complained of mild pain in recovery which resolved with simple analgesia (2 had not had preoperative analgesia).
- day case dental surgery was compared with the guidelines over 1 month.
- Data collected included:
 - patient age and sex
 - dental treatment performed
 - preoperative and intraoperative medication
 - post-operative nausea and pain scores
 - medication required in recovery
- Data was analysed on an Excel spreadsheet.



- In most cases, management was as per the guidelines.
- Post-operative pain was uncommon, but successfully managed with simple analgesia.
- Post-operative nausea and vomiting was not reported, even if no antiemetics were given.
- There was no clear benefit of dual antiemetics.
- Local compliance with the guidelines results in low reported rates of morbidity from GA (nausea, pain and distress) and settled children postoperatively.



REFERENCES

- Knapp R, Marshan Z and Rodd H. Treatment of dental caries under general anaesthetic in children. <u>https://doi.org/10.1038/bdjteam.2017.</u> <u>116</u>
- Royal College of Anaesthetists.
 Guidelines For The Management Of
 Children Referred For Dental Extractions
 Under General Anaesthesia. Available
 from

https://www.rcoa.ac.uk/system/files/PU B-DentalExtractions.pdf [Accessed 2nd January 2020]

KEY MESSAGES

- Preoperative paracetamol and ibuprofen should be routine.
- Avoidance of IV opiates
- Single antiemetic therapy (with advantageous cost implications).