Title: Quit leaning on the Jaw! and The D*^# Dam! : Challenges of Sedating the Pediatric Dental Patient

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Introduction: Dental procedures on children often require some form of sedation. For some children, minimal sedation is not sufficient to facilitate their procedure. These children might be amenable to deep sedation by an experienced sedation service.

Methods: A retrospective review of pediatric dental cases sedated by pediatric intensivist sedation service from 2013 to present. Our objective is to describe the inception of procedural sedation for pediatric dental patients at Kentucky Children’s Hospital and challenges encountered along with modifications in the screening and sedation process over time.

Results: Eighty four cases were performed from the start of this project in 2013 to the present. Medication usage, airway management and events are monitored and categorized as none, major (ETT, LMA, laryngospasm, desaturation, apnea) or minor as part of KCH quality and safety program. Dental procedures typically
involved more than 4 teeth for fillings, caps and/or extractions in patients aged 3 years and older. Patient factors were identified that changed the prescreening criteria. Continuous manipulation of the mouth and the use of protractors made management of the airway challenging. Prophylactic use of nasopharyngeal airways prevent continually interrupting the procedure. Medication usage has been adapted so that a standardized dose of glycopyrrolate is utilized as well as a relatively standard combination of sedative and analgesic medications. As modifications have been made, the proportion of patients experiencing major events decreased from 65% in the first cohort of 40 patients to 39% in the most recent 44 patients.

**Discussion:** Procedural sedation for dental procedures is challenging. With modification of the prescreening process and the approach to medication and airway management, major events have decreased. Ongoing review of cases continues to help identify further opportunities for improvement.