

Sedating children in South Africa

Rebecca Gray^{ab*}  and James Roelofse^{cd} 

^aDepartment of Anaesthesia and Perioperative Medicine, University of Cape Town, Cape Town, South Africa

^bRed Cross War Memorial Children's Hospital, Cape Town, South Africa

^cSedation and Pain Control, University of the Western Cape, Bellville, South Africa

^dAnaesthesiology, University College, London, United Kingdom

*Corresponding author, email: rebecca.gray@uct.ac.za



Dear Sir,

Regarding 'Sedation for paediatric auditory electrophysiology in South Africa'¹ we thank the authors for publishing their research thereby giving us documentary proof of what we know to be widespread practice. Sedation has, for many years, been poorly documented and not subject to the standards in respect of monitoring, medications administered, staff ratios and clinical governance that is its due. Several closed claims analyses and numerous reviews have recognised that paediatric sedation, in particular, is associated with an increased morbidity and mortality.^{2–5} As the authors indicate, there is increasing pressure from practitioners, funders and patients or parents for procedures to take place outside the operating room; the age limit at which this is deemed acceptable is being pushed lower and lower. In addition, the complexity and length of these procedures is increasing.

We share your concerns about safe sedation practice. In the 2016 SASA Paediatric Guidelines⁶ we emphasise the importance of clinical governance and the need for log books, accreditation of practitioners and facilities, recommending the presence of an observer to monitor and help rescue patients during a critical event, and recommend supervised clinical training in paediatric sedation and analgesia. Accreditation for standards of practice for the provision of sedation and analgesia for children is necessary, and is imminent. We have now written the Standards for Procedural Sedation incorporating the SASA guidelines for adults and children^{6,7} for day-care facilities, other facilities and offices where sedation is done.

We agree with you that adherence to guidelines is difficult to determine. As part of our accreditation programme, facilities where sedation is being done should fill in a practice appraisal, a copy of which can be found in the appendix section of the SASA guidelines.⁶ In this way we hope to get a better understanding of compliance.

Sedation needs to become a formal part of anaesthetic registrar training, including supervised training in the practice of sedation. Additionally, SASA, through SOSPOSA (the Society of Sedation Practitioners of South Africa), needs to connect with practitioners in all fields of medicine in which sedation is being performed in order to provide them with resources such as the guidelines and to oversee the development of reasonable, achievable and safe standards of practice in the diverse contexts in which sedation is being practised.

We also note with interest your comments about drugs in the paediatric population. Airway obstruction is always a possibility

with the administration of sedating drugs in small children. We see no mention of rectal midazolam here as an alternative sedative agent. We have found rectal midazolam to be an excellent option in our study and often use it for small children.⁸ In another study children under two years of age undergoing cutaneous procedures received midazolam by rectum, randomised in double-blind fashion to standard (0.5 mg/kg) or high (1 mg/kg) doses. Rectal midazolam improved sedation scores over pre-procedure levels and was more effective with a dose of 1 mg/kg than with 0.5 mg/kg.⁹

Dr Rebecca Gray

Prof James Roelofse

ORCID

Rebecca Gray  <http://orcid.org/0000-0003-4704-3705>

James Roelofse  <http://orcid.org/0000-0001-9317-3389>

References

1. Moodley S, Storbeck C. Sedation for paediatric auditory electrophysiology in South Africa. *SAJAA*. 2016;22(6):185–9.
2. Cravero JP, Beach ML, Blike GT, et al. The incidence and nature of adverse events during pediatric sedation/anesthesia with propofol for procedures outside the operating room: a report from the Pediatric Sedation Research Consortium. *Anesth Analg*. 2009;108(3):795–804.
3. Coté CJ, Notterman DA, Karl HW, et al. Adverse sedation events in pediatrics: a critical incident analysis of contributing factors. *Pediatrics*. 2000;105(Pt 1):805–14.
4. Coté CJ, Karl HW, Notterman DA, et al. Adverse sedation events in pediatrics: analysis of medications used for sedation. *Pediatrics*. 2000;106:633–44.
5. Chicka MC, Dembo JB, Mathu-Muju KR, et al. Adverse events during pediatric dental anesthesia and sedation: a review of closed malpractice insurance claims. *Pediatr Dent*. 2012;34(3):231–8.
6. Roelofse JA, Gray RM. Paediatric sedation guidelines for procedural sedation and analgesia. *S Afr J Anaesth Analg*. 2016;22(1 Suppl 5):1–33.
7. Piercy JL, Roelofse JA. Guidelines for the safe use of procedural sedation and analgesia for diagnostic and therapeutic procedures in adults. *S Afr J Anaesth Analg*. 2015;21(2):S1–36.
8. Roelofse JA, Van Der Bijl P, Stegmann DH, et al. Pre-anaesthetic medication with rectal midazolam in children undergoing dental extraction. *J Oral Maxillofacial Surg*. 1990;48:791–6.
9. Kanegaye JT, Favela JL, Acosta M, et al. High-dose rectal midazolam for pediatric procedures: a randomized trial of sedative efficacy and agitation. *Pediatr Emerg Care*. 2003 Oct;19(5):329–36.

Received: 08-02-2017 Accepted: 22-02-2017