reflux aspiration during the operation. In addition, the LMA has limited use as a supraglottic ventilation device when laryngeal spasms occur during the examination. However, it is preferred during the bronchoscopy examinations in adults. Additionally, it is impossible to remove an AFB in a 2-year-old boy through the tracheal tube using a flexible bronchoscope of 5.1 mm diameter. So a guide wire (outer diameter 0.035 mm, Boston science, USA) was put through the flexible bronchoscopy channel to reach the carina of the trachea. Then, under the guidance of the guide wire, the distal end of the endoscopic spray catheter (Micro-Tech Nanjing, WP-18/1800, China, outer diameter 1.8 mm, length 1800 mm) was sent into the carina of the trachea (Figure 1B). This tool is designed to be used with endoscopes and is intended for washing and introducing dye within the digestive tract. The endoscopic spray catheter was connected to the oxygen inhalation device through a 1-mL syringe and rubber joint to serve as a new subglottic ventilation device (Figure 1C), with an oxygen flow of 2 L/min. The tube was always kept unobstructed during the operation. Applying suction, we succeeded in removing three nuts within 1 hour using this flexible bronchoscopy (Figure 1D). Importantly, the symptoms of hypoxemia did not present again during the operation.

Flexible bronchoscopy is a supplement to rigid bronchoscopy, which is more advantageous for patients with a narrow throat, restricted neck movement, and a tendency to bleed. Recent studies have demonstrated that with skilled professionals and the right instruments, flexible bronchoscopy also has a high success rate in removing AFBs from children. It is mostly introduced through an endotracheal tube or LMA to ensure proper ventilation.[3]

This method provides an alternative to the endotracheal tube and LMA for the diagnosis and interventional procedures in children during flexible bronchoscopy.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

Xuyang Xiao
Xianhui Yang
Zhigang Zhuang
Tieli Dong

Department of Anesthesia and Pain Management, The Second Affiliated Hospital of Zhengzhou University, Zhengzhou, China

Correspondence
Tieli Dong, Department of Anesthesia and Pain Management of the Second Affiliated Hospital of Zhengzhou University, Zhengzhou 450014, China.
Email: drtielidong@sohu.com

ORCID

Tieli Dong https://orcid.org/0000-0002-4008-8647

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DOI: 10.1111/pan.13884

Role of outpatient pediatric natural airway sedation during the COVID-19 pandemic

Sir—During the SARS-CoV-2 (COVID-19) pandemic, hospitals have canceled elective surgeries and other procedures in children in order to re-allocate resources and decrease transmission of the COVID-19 virus.[1] However, sedation/anesthetic care for specific subsets of infants and children still needs to be provided. For example, infants or children with oncologic disease need surveillance with lumbar punctures, bone marrow biopsy/aspiration, radiological imaging studies during their treatment, in addition to intrathecal chemotherapy. Children with extremity fractures, new diagnoses of severe headache, back pain, ataxia, stroke symptoms, and septic arthritis, may also require urgent diagnostic (eg, radiological imaging) or therapeutic procedures (eg, fracture reduction/casting, diagnostic joint aspiration).

While some anesthesiologists may advocate for securing the airway of COVID-19 patients with a cuffed endotracheal tube (ETT) or laryngeal mask airway to eliminate the possibility of aerosol generation during the case; outside of this COVID-19 pandemic, the vast majority of sedation for many diagnostic or therapeutic procedures are performed outside the operating room using natural airway sedation by pediatric subspecialists including pediatric anesthesiologists, with a high success rate and a very low incidence of adverse events.[2] Natural airway sedation performed without airway instrumentation using intravenous agents such as propofol, dexmedetomidine, or ketamine eliminates the need for an ETT or laryngeal mask airway. A systematic review published in 2013 that reported the odds of

exposure to the SARS-Corona virus due to aerosol generation were much lower with suction, administration of oxygen, or manual ventilation compared to airway intubation.[3] We therefore suggest that natural airway sedation is an attractive option in some of these patients, and sedation/anesthesia providers should consider the option of natural airway sedation for imaging and other minor procedures rather than general endotracheal anesthesia in order to reduce aerosol particle generation during the COVID-19 pandemic. Monitoring via nasal cannula with end-tidal CO2 (EtCO2) detection capacity should still be used and a regular isolation mask applied to over this nasal cannula. Other advantages that associated with this technique in well-organized sedation programs include shorter duration of sedation, faster recovery, and prompt discharge of the patient which ultimately results in decreased exposure of staff to the patient and lower healthcare cost and resource utilization.[4]

Furthermore, we advocate for a telehealth prescreening evaluation and subsequent multi-disciplinary discussion among the sedation team to ensure optimal patient selection and risk stratification. We suggest the exclusion of high-risk patients such as those with difficult airways, respiratory distress, copious secretions, American Society of Anesthesiologists-Physical Status classification >3, and history of previous anesthesiology consultation. We also urge anesthesia/sedation providers to strictly adhere to guidelines from the Centers for Disease Control (endorsed by ASA, AANA, APSF) on PPE, N95, and other institution dependent infection control measures to decrease transmission of COVID-19 even if natural airway sedation is performed.[5]

CONFLICT OF INTEREST

The authors report no conflict of interest.

Rahul C. Damania[1]
Anne Stormorken[2]
Mary Landrigan-Ossar[3]
Joseph P. Cravero[3]
Pradip P. Kamat[1]

[1]*Division of Pediatric Critical Care Medicine, Department of Pediatrics, Emory University School of Medicine, Children's Healthcare of Atlanta, Atlanta, Georgia*
Email: pradip.kamat@choa.org
[2]*Division of Pediatric Critical Care Medicine, Department of Pediatrics, Case Western 15 Reserve School of Medicine, Cleveland, Ohio*
[3]*Department of Anesthesiology, Critical Care & Pain Medicine, Boston Children's Hospital, Harvard School of Medicine, Boston, Massachusetts*

ORCID

Joseph P. Cravero https://orcid.org/0000-0003-0629-6511
Pradip P. Kamat https://orcid.org/0000-0002-9633-0973

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DOI: 10.1111/pan.13906

Feasibility of awake craniotomy in the pediatric population

We are very grateful to Dr Prabhakar et al for their interest in our study and appreciate the continued opportunity to discuss our recent article.

In their letter, they provide a description of their anesthetic management of awake craniotomies in the pediatric population. As opposed to our asleep-awake-asleep technique, their approach is based on the combination of scalp block and monitored anesthesia care, the latter being accomplished with an infusion of dexmedetomidine at varying doses supplemented with fentanyl boluses. A very similar approach has been previously described by Everett et al[1] and Sheshadri et al,[2] reporting a successful brain mapping with dexmedetomidine at doses of 0.1-0.2 mcg/kg/h. However, in