A 3-year-old boy was brought to his local emergency room by emergency medical services after a choking episode. Upon arrival to the emergency department, his oxygen saturations were in the 60s with bag-masking. After 2 failed attempts at endotracheal intubation by emergency room and anesthesia providers, saturations declined to undetectable and a bradycardic event necessitated atropine administration. With continued bag-masking and placement of a shoulder roll, the pediatric surgeon performed an emergent surgical cricothyroidotomy using a generous vertical incision over the cricoid, a clamp to spread the strap muscles, a transverse incision through the trachea, and a tracheal spreader to insert an endotracheal tube. Upon transfer to our institution, suspension microlaryngoscopy revealed a translucent tuxedo button 100% occluding the glottis (Figure 1). Cup forceps were used to remove the button from the glottis and no mucosal injury or additional foreign body was identified on rigid or flexible bronchoscopy. A nonocclusive neck dressing was placed. The patient was reintubated orotracheally, treated with steroids overnight for mild supraglottic edema, and then extubated the following day with return to baseline voice and functioning. This project was determined to be exempt by the Johns Hopkins Medicine Institutional Review Board.

Discussion
The complete glottic obstruction and inability to clear the obstruction with conservative maneuvers in this case can be attributed to the unusual shape of the tuxedo button as an airway foreign body. The narrower rounded flange slipped directly through the vocal folds, allowing the wider translucent flange to lodge directly over the vocal folds and completely block the airway. Although the literature lacks consensus regarding the use of needle or open surgical cricothyroidotomy in a child in the “cannot intubate, cannot ventilate” situation,1,2 the excellent outcome in this case can be attributed to the timely surgical cricothyroidotomy, which stabilized the child’s airway for transfer to a higher level of care. This case emphasizes the value of prompt

---

No sponsorships or competing interests have been disclosed for this article.

Keywords
airway foreign body, cricothyroidotomy

Received October 31, 2018; revised December 7, 2018; accepted December 20, 2018.

Ruth J. Davis, MD and C. Matthew Stewart, MD, PhD

1Department of Otolaryngology–Head and Neck Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

Corresponding Author:
Ruth J. Davis, MD, Department of Otolaryngology–Head and Neck Surgery, Johns Hopkins University School of Medicine, 601 N. Caroline St, 6th Floor, Baltimore, MD 21287, USA.
Email: rdavi112@jhmi.edu

Figure 1. (A) Endoscopic image of a tuxedo button lodged within the glottis causing complete airway obstruction. (B) The tuxedo button after removal from the airway.
surgical airway intervention in a patient with complete airway obstruction due to an aspirated foreign body.

**Acknowledgments**

We thank Clint D. Cappiello, MD, for performing the life-saving cricothyroidotomy, and for providing critical details of the patient’s initial presentation for inclusion in this manuscript.

**Author Contributions**

Ruth J. Davis, acquisition of data, manuscript drafting; C. Matthew Stewart, acquisition of data, critical manuscript revision.

**Disclosures**

Competing interests: None.
Sponsorships: None.
Funding source: None.

**References**
