**INTRODUCTION**

PeDI has associated increased airway complication risk with increasing intubation attempts and decreasing patient weight, and best first-attempt intubation success with fiberoptic bronchoscopy, the gold standard. Furthermore, supraglottic airway (SGA) versus oral airway use as a conduit increases the rate of fiberoptic intubation success in children. However, blood in the airway can render fiberoptic bronchoscopy nearly impossible. In this situation, retrograde intubation may be indicated, as it can be successfully performed despite the presence of airway blood or secretions.

**CASE REPORT**

A 30-kg, 19 y/o woman with congenital myopathy, requiring continuous, controlled, non-invasive ventilation, presented for EGD for suspected GI bleeding. She had severe midface hypoplasia (Figure 1) from years of nasal BiPAP wear, and refused tracheostomy. She communicated in Spanish using a speaking board.

Due to communication barriers and case urgency, an awake intubation attempt was deemed suboptimal. Therefore, midazolam, ketamine, and sevoflurane without muscle relaxation to maintain spontaneous ventilation were administered. However, attempts at both oral fiberoptic bronchoscopy (with and without an SGA) and rigid videolaryngoscopy failed to reveal her glottis and enable intubation, likely from her neck immobility and extreme anteriorly angled glottis. The patient was also coagulopathic, which resulted in a bloody airway after the multiple intubation attempts.

Given the airway soilage, a retrograde intubation attempt using the Cook Retrograde Kit was made. Accordingly, an 18G introducer needle was inserted through the cricothyroid membrane with good air/saline contrast. The kit guidewire was then advanced, J-tip first, through the introducer and found to exit the patient’s left nare. The kit airway exchange catheter (AEC) was placed anterograde over the guidewire, and a 5.0 ID cuffed tracheal tube was advanced over the AEC/guidewire combination through the glottis. The AEC and guidewire were removed and the tracheal tube was advanced to the mid-trachea, confirmed by fiberoptic bronchoscopy and x-ray. The patient then underwent EGD and cauterization of gastric ulcers. Dexamethasone was administered to decrease airway edema, and she was transferred intubated and sedated to the ICU for recovery.

**DISCUSSION**

With the availability of videolaryngoscopy and fiberoptic bronchoscopy, retrograde intubation is now rarely performed, but can be a life-saving airway maneuver. This case highlights the importance of maintaining retrograde intubation skills and teaching this 50-year-old technique to trainees, despite a multitude of advanced airway techniques available today, as it can still be performed in cases of a difficult intubation with blood obscuring the airway.

**REFERENCES**

3. Anaesthesia, 2009; 64: 1094–1104