Difficult Airway Management in Ghana
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BACKGROUND
• A difficult airway is defined as the clinical situation in which a conventionally trained anesthesiologist experiences difficulty with facemask ventilation of the upper airway, difficulty with tracheal intubation, or both.1
• Management of the pediatric difficult airway can be very challenging, even in well-resourced centers.
• In low and middle income centers, one may often be confronted with a difficult airway in the absence of proper equipment.
• We present the case of a difficult airway in a patient with a rapidly growing Giant Cell Granuloma of the Maxilla.

CASE
• Patient: 7 yr-old, 20.7 kg female.
• No prior medical/surgery history or allergies.
• Chest x-ray was normal.
• No tracheal deviation or respiratory distress sitting or supine and mouth opening was minimal.
• No fiberoptic/videoscope was available.
• 22 g IV started without preoperative medication.
• Ketamine 10 mg was given IV.
• In supine position with spontaneous respiration, sevoflurane was slowly administered via a small pediatric mask over nares with jaw thrust.
• Tracheostomy was performed and 5.0 endotracheal tube placed.
• A second IV and monitors were applied. EBL=700 mL.
• One unit packed RBCs and 1000 mL crystalloid were administered.
• The tumor was successfully removed without difficulty.
• Patient was intubated overnight with spontaneous respirations before being extubated the next day.

FIGURES
Fig 1. Preop normal chest x-ray
Fig 2. Granuloma preop
Fig 3. Granuloma preop
Fig 4. Unable to place laryngoscope
Fig 5. Use of pediatric mask for nasal spontaneous ventilation
Fig 6. 5.0 endotracheal tube placed
Fig 7. Excised granuloma
Fig 8. Patient postop
Fig 9 (above). Patient postop, lateral view
Fig 10 (right). Patient 9-mo postop

DISCUSSION
• The child came from a very poor family and traveled a far distance to seek care at KATH.
• Anesthesia and surgery staff did not have the luxury of completing expensive diagnostic tests or time to fully prepare, as there was a risk of the patient leaving and not returning.
• When confronted with a difficult airway, the best prognosis is achieved with a well-prepared team, following established protocols, and access to appropriate equipment.
• When a sound knowledge of basic anesthesia is combined with the resolve to provide good care, safe anesthesia can be provided by careful examination of the situation and continual review.
• Sociocultural and financial situations of patients in low to middle income places meant that good care is more acceptable than no care when providers cannot meet international standards.

CONCLUSION
• There are limited approaches to the difficult airway when resources are limited. Understanding this will lead to better preparedness and flexibility.

REFERENCES