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Letter to the Editor

Anaesthetic Management of a Case of Acquired Tracheoesophageal Fistula for Percutaneous Endoscopic Gastrostomy Insertion: It Is Taxing but Delightsome at the end

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Letter to the Editor

Dear Editor

Foreign Body (FB) ingestion is a potentially serious problem that peaks in children between 6 months and 3 years of age. Button batteries represent a low percentage of all foreign bodies swallowed by children which must be distinguished from impacting of other foreign bodies because of their severe complications [1]. A 2 yrs. old child reported with an alleged history of button battery ingestion with X-ray Chest showing a suspected foreign body impacted in the upper/mid esophagus (Figure 1). Upper GI endoscopy was done and a button battery was removed. Post removal, the child developed features of cough on feeding and febrile episodes. Upper GI endoscopy followed by HRCT Chest revealed fistulous tract between the mid esophagus anddistal trachea along the posterolateral margin of the trachea measuring 8 mm × 5 mm × 4.5 mm in size. The tracheal opening is approximately 1.8 cm proximal to the level of the carina. Mild subpleural fibrotic bands in bilateral upper and lower lobes (Figure 2). Considering the malnourishment of the child, it was decided to improve the nutritional status of the child by performing a Percutaneous Endoscopic Gastrostomy (PEG) insertion under anaesthesia and then to proceed with the definitive corrective repair of acquired TEF later on. The patient had bilateral chest wheeze with signs of poor nutrition (low BMI and anaemia). Preoperative nebulization and antibiotics were continued with oral antiemetic on the morning of the procedure before shifting the patient to the operating room. The challenges were to place the Endotracheal Tube (ETT) beyond the tracheal fistula opening, to avoid air leak through the fistula, prevention of aspiration, and provide optimally the field for Gastroenterologist to place the endoscope. Following preoxygenation with 100% oxygen, the patient was induced with Inj Propofol 20 mg IV with simultaneous cricoid pressure. A 4.0 mm ID micro-cuffed oral ETT was placed endobronchial in a single attempt which resulted to absent air entry in the left side of the chest on auscultation. The ETT was withdrawn gradually till the air entry was equal in bilateral

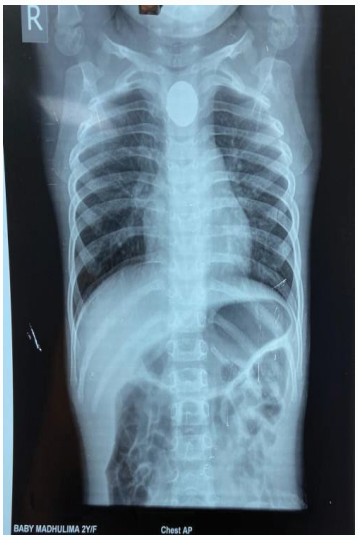

Figure 1: X-ray chest showing the FB.

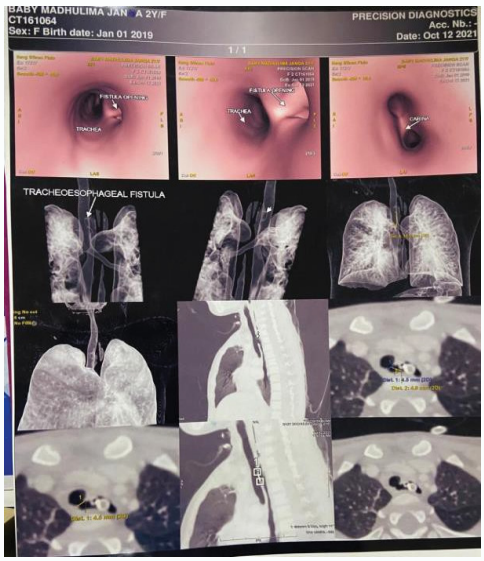

Figure 2: HRCT Chest while evaluating the patient.

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lung fields and absent in the epigastric region. Cuff was inflated and fixed with the administration of a muscle relaxant. Fiberoptic bronchoscope confirmed the targeted position of the ETT with the absence of abdominal distension and air entry in the epigastric region. End-tidal CO_2 trace was confirmed before handing over the patient for the procedure. Percutaneous endoscopic gastrostomy insertion was completed in the next 15-20 mins without any adverse events. Confirming the adequacy of spontaneous ventilation and precaution for prevention of aspiration, extubation was done in a fully awake state.

Conclusion

This case has brought out some relevant learning points. We must investigate the type of FB ingestion whenever we encounter a case like this. This type of procedure should be done a standard Gastroenterology Suite or in controlled environment in the operation theatre in resource limited set up. The standard perioperative technique to be followed as it was done in this case justifying that it is always better to act safe than an adventurous one.

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