Introduction:
Esophageal foreign body (FB) is a potentially serious cause of morbidity and mortality in children. The common presenting symptoms of esophageal FB are excessive drooling, poor feeding, dysphagia and vomiting. Rarely esophageal foreign bodies may cause respiratory symptoms, such as cough, stridor, and wheezing. We present a case of an incidental finding of a long standing radiolucent FB in the esophagus of a 3 year old patient with a history of progressive stridor.

Case Report:
A 3 year old, 13 kg female patient was scheduled for routine tonsillectomy and adenoidectomy (T&A) for obstructive sleep apnea. Her past medical history was significant for a mild progressive stridor for the past few months. X-ray of the neck showed a subtle compression of the lower cervical trachea (Fig 1). On the day of the surgery the surgeon felt that the severity of stridor was significant. He decided to do a microlaryngoscopy and bronchoscopy (MLB) before proceeding for T&A. Our preoperative examination revealed a mild biphasic stridor over both lung fields. The rest of the physical exam was within normal limits.

Once in the operating room, after placing the standard ASA monitors, slow inhalation induction was achieved with 30% oxygen, 70% nitrous oxide and sevoflurane. Intravenous access was secured and the patient was kept spontaneously breathing on propofol infusion. After achieving an adequate depth of anesthesia, the surgeon performed MLB which revealed severe tracheomalacia with compression from the posterior aspect (Fig 2) at the distal tracheal level. The trachea was normal proximal and distal to the narrowing. In order to ascertain the cause for tracheomalacia, an esophagoscopy was performed with a rigid esophagoscope. It revealed a plastic penny coin in the upper esophagus (Fig 3). The patient’s trachea was secured with uncuffed 5.0 mm endotracheal tube passed beyond the narrow portion of the trachea, before an attempt was made to remove the FB. After numerous unsuccessful attempts with the endoscopic forceps, the surgeon performed an open esophagostomy to retrieve the FB. Following the extensive surgery, the surgeons decided to postpone the planned T & A to a later date. Due to the presence of severe distal tracheomalacia it was decided to leave the endotracheal tube in place and monitor the patient in the pediatric intensive care unit. A Dobhoff tube (DHT) was placed with aim of feeding the patient enterally until oral feeds could be tolerated. The patient was extubated two days later and discharged home on the fifth post operative day. Subsequently the DHT was removed successfully after 2 weeks.
Discussion: Foreign body ingestion is a potentially serious problem that peaks in children aged six months to three years (1). Radiolucent FBs are especially difficult to diagnose (2). Cough or stridor are unusual symptoms from esophageal FB and are possibly due narrowing of trachea. It could be caused by direct pressure on the membranous posterior tracheal wall by the foreign body itself or by secondary esophageal dilatation. With prolonged retention, the foreign body may produce a periesophagitis or can get imbedded in the wall of the esophagus producing a foreign body granuloma resulting in compression of the trachea and stridor (3). Close proximity of the airway to the partially obstructed esophagus predisposes to tracheal aspiration and symptoms of pneumonia (4). The foreign body may even erode the wall of the esophagus and create a tracheoesophageal fistula. Our patient presented with long standing stridor and the foreign body was found only incidentally. There was no suspicion of the eventual problem until MLB and esophagoscopy were performed.

Reference: