**Management of an Unusual Airway Foreign Body**

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### Introduction:
We present an infant with partial airway obstruction due to an unusual foreign body.

### Case Report:
Patient T.B. was a healthy 9 month old who presented to the ER at the Children’s Medical Center with a chief complaint of foreign body in mouth. Mother stated that she had been cleaning the bathroom and noticed that the patient had something in his mouth. She looked and saw a white ball-like object in his mouth. She was unable to remove it and was concerned about his breathing. EMT’s arrived and were unable to dislodge the object with back thrusts and transported the child to the ER. En route the child was stable, with normal SpO2 and minimal respiratory distress. The ER staff was unable to remove the object and consulted otolaryngology, who felt the child should be taken to the operating room for further attempts at removal.

On exam the child was seated upright and drooling blood-tinged saliva. Vital signs were stable and SpO2 was 100%. He was in mild to moderate respiratory distress with labored breathing and minimal retractions. A white plastic hemispherical object occupied the majority of the posterior oropharynx. The remainder of the exam was unremarkable. There was agreement between anesthesia and surgery that although the patient’s airway was adequate, further attempts to remove the object or instrument the airway could potentially reposition the object causing complete obstruction. The operating room was prepared with a variety of laryngoscopes, rigid and flexible bronchoscopes, and instruments to secure a surgical airway if needed. In the OR patient was given glycopyrrolate and a slow inhalation induction with spontaneous ventilation was begun. As the patient lost consciousness a nasal airway was placed to provide a more secure passage for air behind the obstruction; afterward the patient’s respirations were less labored.

The patient was then placed supine and the surgeons were able to remove the object with Kelly forceps; it was noted that greater than expected effort was required. On inspection the object was a hollow plastic hemisphere consistent with the covers on bolts used to secure toilets to the floor (fig.1).

Following removal of the foreign body a complete airway exam was performed. There was a small laceration on the anterior floor of the mouth but no other evidence of trauma or swelling. Nonetheless, it was decided to leave the patient intubated overnight because of concerns about the development of airway edema. After re-evaluation the next day the patient was extubated and discharged home with no evidence of long-term sequelae.

### Discussion:
Airway foreign bodies are an important cause of injury in children and can be challenging to manage. In this case the concave surface of the cover acted as a suction cup to firmly attach the object to the base of the tongue. This made removal difficult but may have had the benefit of preventing the object from migrating further down the airway and causing complete obstruction. The placement of a nasopharyngeal airway improved the obstruction and provided an additional margin of safety.

![Figure 1: Bolt covers similar to the one removed from our patient’s airway](image-url)