

Accidental Ingestion of a Fixed Partial Denture During Emergence from General Anesthesia

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LEARNING OBJECTIVE

- Recognize the potential for dislodging seemingly secure dental hardware following surgical procedures that involve frequent oral manipulation
- Highlight the management and possible adverse outcomes

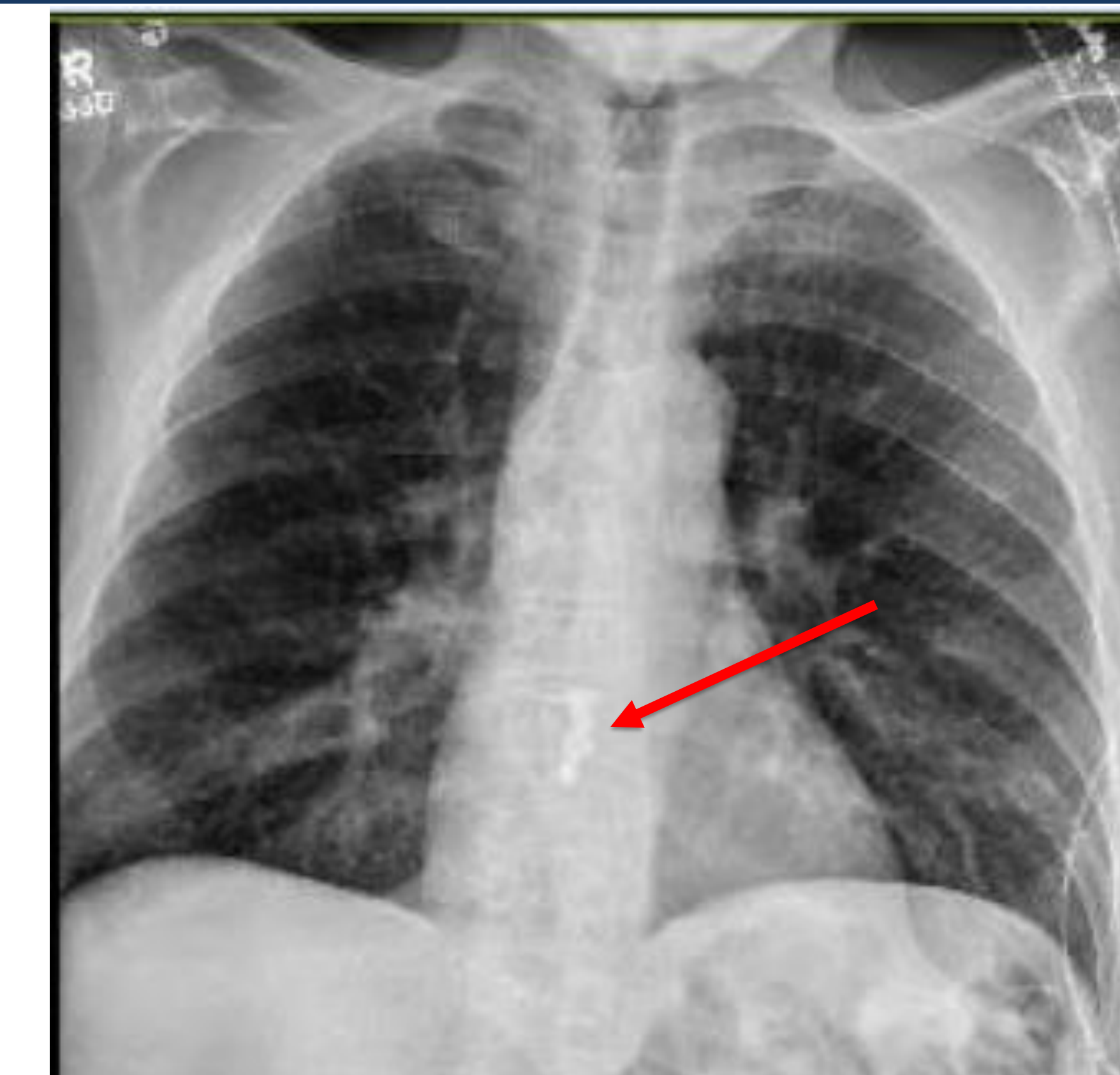
CASE PRESENTATION

A 69-year-old male with a PMHx of laryngeal papilloma presented for direct laryngoscopy and laser excision of laryngeal/pharyngeal lesions.

- Preoperative airway exam revealed multiple missing teeth and a recently cemented, seemingly secure maxillary anterior 4 unit fixed partial denture.
- After induction of general anesthesia, the patient was intubated with a 6.0 endotracheal tube using a Glidescope.
- A tooth guard was placed, and the surgery proceeded without complication.
- The airway was instrumented several times during the surgery, but the surgical team noted all teeth remained intact post-procedure.
- The patient was rigorously suctioned with a yankauer and extubated.
- In the PACU, the patient complained of chest discomfort and missing partial denture.
- Chest X-ray verified the denture with an attached post was in the esophagus.
- An emergent endoscopy was performed with successful retrieval of the foreign body.

DISCUSSION

The potential for dental trauma and displacement of odontogenic items is a serious complication faced by anesthesiologists. Dental trauma is most often associated with poor dentition and difficult intubation, possibly even extubation and suctioning like in this case. Aspiration or ingestion of teeth and dental hardware can often go unnoticed and has the potential for serious patient harm. The shape and size of ingested teeth or dentures can affect their ability to pass through the gastrointestinal tract. If dislodged, perforation with subsequent bleeding, peritonitis, and sepsis can ensue. The initial evaluation for suspected ingestion of dental material should include radiographic imaging to identify the location of the foreign body. Negative imaging, however, does not eliminate the possibility of ingestion and in the presence of symptoms, such as dysphagia, endoscopic evaluation should be pursued. After identifying the location of the ingested material, a determination can be made about its ability to pass through the GIT without potential for perforation. High risk items should be retrieved endoscopically without delay.



MANAGEMENT OF INGESTED FOREIGN BODY PROTOCOL (ADULTS)

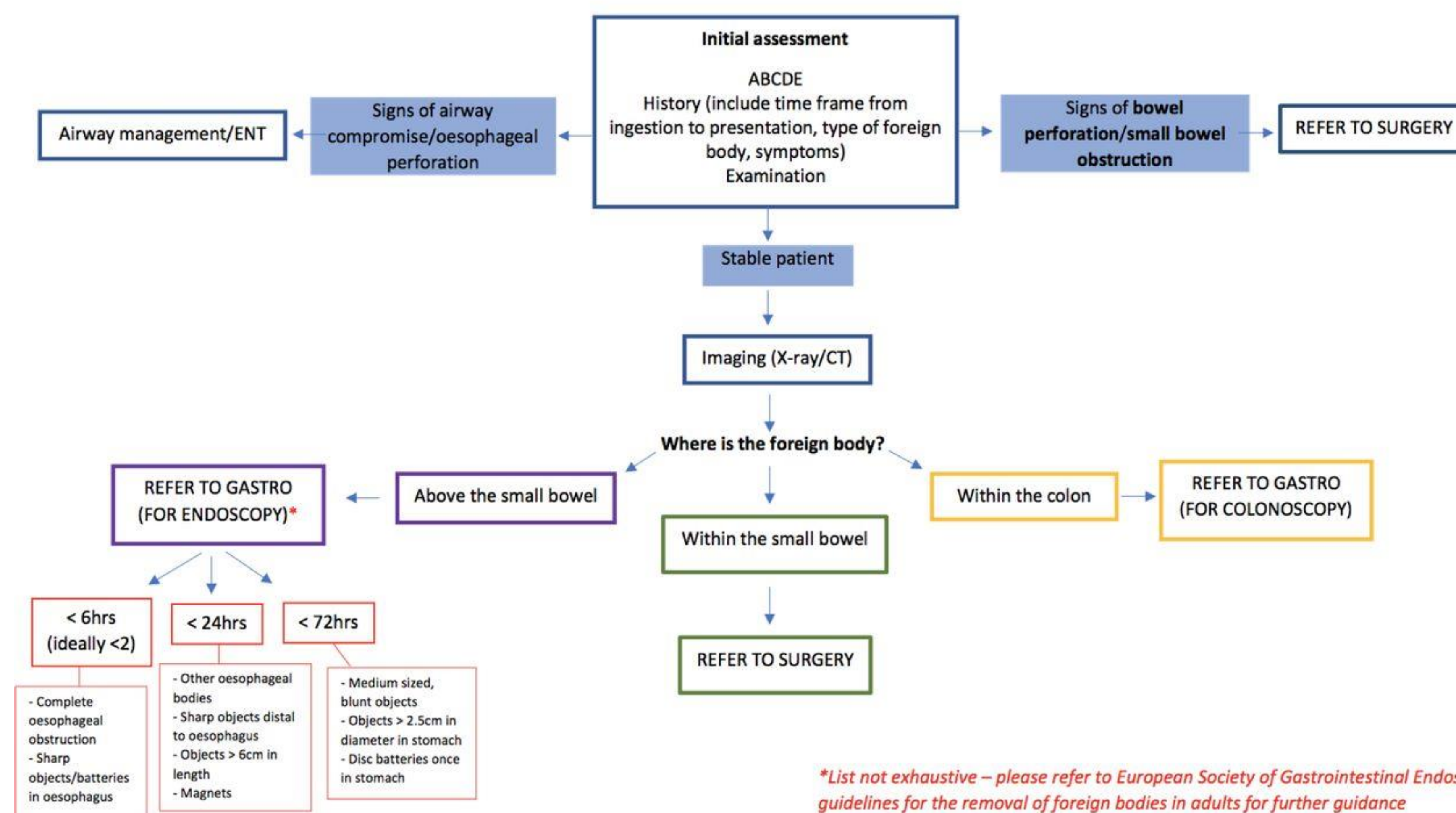


Figure 1: The Management of Ingested Foreign Bodies in Adults (Nagendran V, Jenkins R, Bostina R, 2022)

CONCLUSION

- A thorough dental exam is a crucial part of preoperative and postoperative anesthetic evaluation
- Dental hardware including dentures, bridges, implant, are crowns are becoming more common and it is important to recognize the potential for dislodging seemingly secure hardware
- Prompt recognition of ingested foreign body is crucial and high risk items should be removed promptly.

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