Management of Ingested foreign bodies in the ED

Background

History of foreign body ingestion is a common presenting complaint. Metallic foreign bodies are more commonly implicated than non-metallic. Coins are the most common.

Most ingested foreign bodies will pass harmlessly through the GI tract. However oesophageal impaction is a recognised complication even in the asymptomatic with potentially serious sequelae such as oesophageal perforation, mediastinitis and ulceration.

Metal detectors have been used to detect metal foreign bodies in several studies. They have been proven to be both sensitive and specific in confirming presence of coins in particular, and localising them to above or below the diaphragm.

Assessment and Management

• In children who have a history of swallowing a radiolucent FB and are asymptomatic with normal examination reassure and discharge with advice to return if significant symptoms appear.

• In children who have a history of swallowing a radiolucent FB who are symptomatic i.e. drooling, FB sensation, dysphagia refer surgical team.

• For metallic FB see flow chart below. Good evidence exists for localisation of coins with a metal detector. The evidence for non-coin metal FBs is not as strong so if metal detection were negative we would advise conformation with a CXR.

• If FB metal detector positive above diaphragm but not visible on CXR retry with metal detector. Consider aluminium FB (radiolucent).

• Button batteries should be treated in the same way as other metallic foreign bodies. (There is an increased complication rate in those >20mm in diameter. If in abdomen initially arrange 48 hr review in ED clinic for possible AXR)

• Several case studies have highlighted the danger of swallowing multiple mini magnets (used on notice boards etc).

• Sharp objects should be treated in the same way as other metal foreign bodies although complication rates increase from less than 1% to 15 to 30%

References

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**X INGESTED COIN ASYMPTOMATIC**
- METAL DETECTOR (MD)
  - MD +IVE BELOW XIPHISTERNUM OR -VE

**HX INGESTED METAL FOREIGN BODY (NOT A COIN) ASYMPTOMATIC**
- METAL DETECTOR (MD)
  - MD +IVE ABOVE XIPHISTERNUM

**HX INGESTED METAL FB. (INCLUDING COINS) SYMPTOMATIC:**
- FB SENSATION
- DYSPHAGIA
- DROOLING ETC
- METAL DETECTOR (MD)
  - MD +IVE ABOVE XIPHISTERNUM OR -IVE

**MD +IVE BELOW DIAPHRAGM**
- CXR
  - FB BELOW DIAPHRAGM OR NOT VISIBLE
    - REASSURE, DISCHARGE. ADVISE NOT TO LOOK THROUGH STOOL. (RETURN IF ABDOMINAL SYMPTOMS)
  - FB ABOVE DIAPHRAGM
    - REFER SURGEON/ENT

**MD +IVE BELOW XIPHISTERNUM**
- CXR
  - IF SYMPTOMATIC AND COMPROMISED IN ED
    - ACTION
  - REASSURE DISCHARGE