

Ingested Metal Foreign Body - Summary Paediatric Clinical Guideline – Joint Derby and Burton

Reference No: CH CLIN C17/Oct 21/v004

This guideline covers suspected/known ingestion of:

- Non-hazardous metal foreign body e.g. coins
- Hazardous metal foreign body including batteries, magnets, sharp objects

For non-hazardous metal foreign bodies, use the hand-held metal detector (HHMD) to localise the object. Asymptomatic children who have ingested an object <5cm in length where the HHMD detects the object below the diaphragm do not need X-ray confirmation and can be discharged home. Children with objects localising above the diaphragm on HHMD require CXR and ENT review.

Button batteries can cause catastrophic haemorrhage from the GI tract⁵. Children who have ingested a button battery require urgent CXR and AXR. Batteries in the oesophagus require immediate removal (endoscopic/magnetic/surgical). If the battery is below the diaphragm and the child is asymptomatic, they may be discharged with arrangement for review in 48hours.

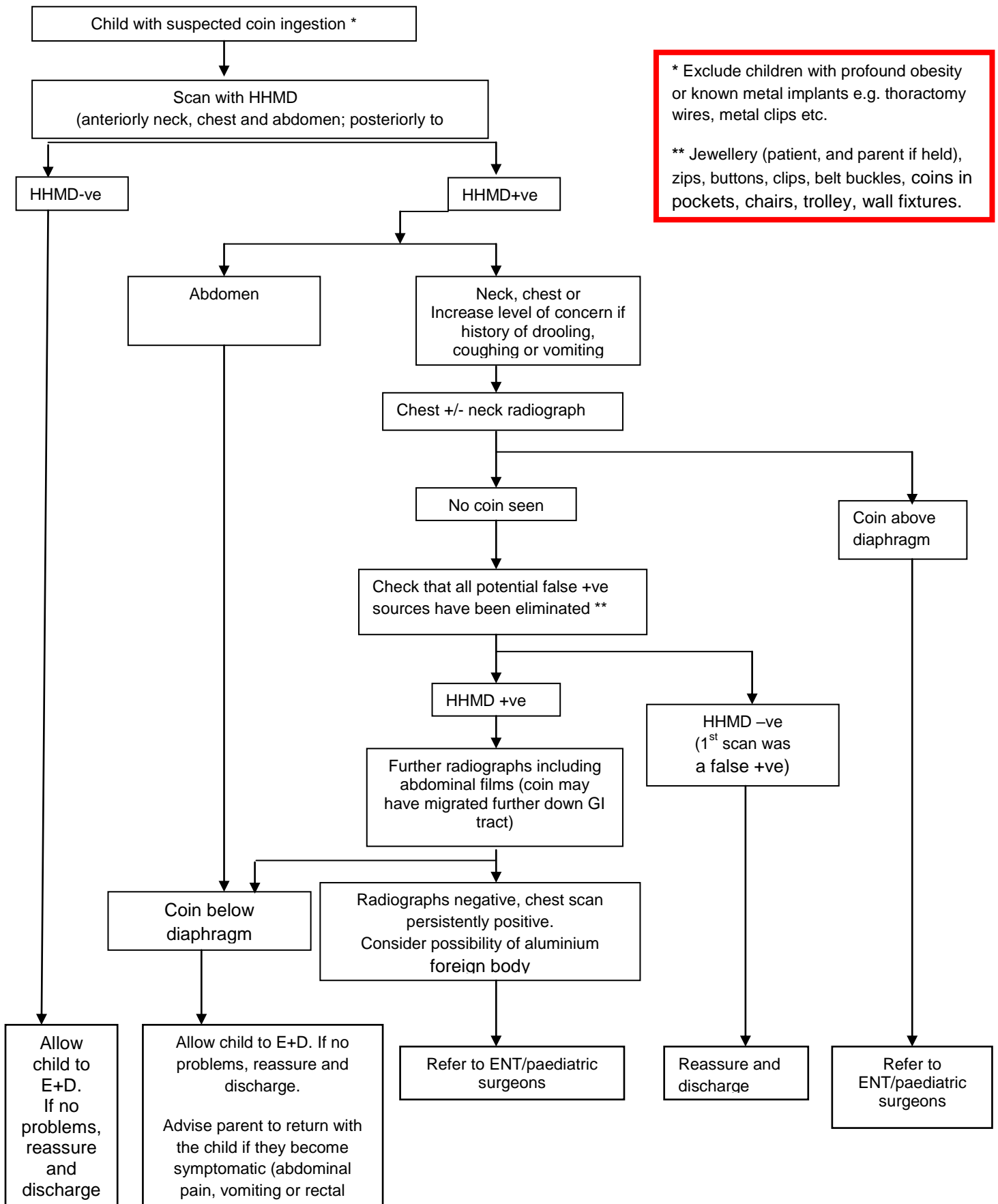
Neodymium (super strong) magnets can cause significant harm if ingested with another metal object or battery, or if more than one magnet is ingested. Ingestion of a magnet with a button battery is a time critical emergency. Where super strong magnet ingestion is suspected, request urgent erect CXR and supine AXR. If a suspected magnet is seen on the AXR, a lateral AXR must be performed to assess number of magnets (two magnets in alignment may appear as one on the first view).

Asymptomatic children who have ingested a single magnet may be suitable for discharge home from the Emergency Department if the following criteria are met:

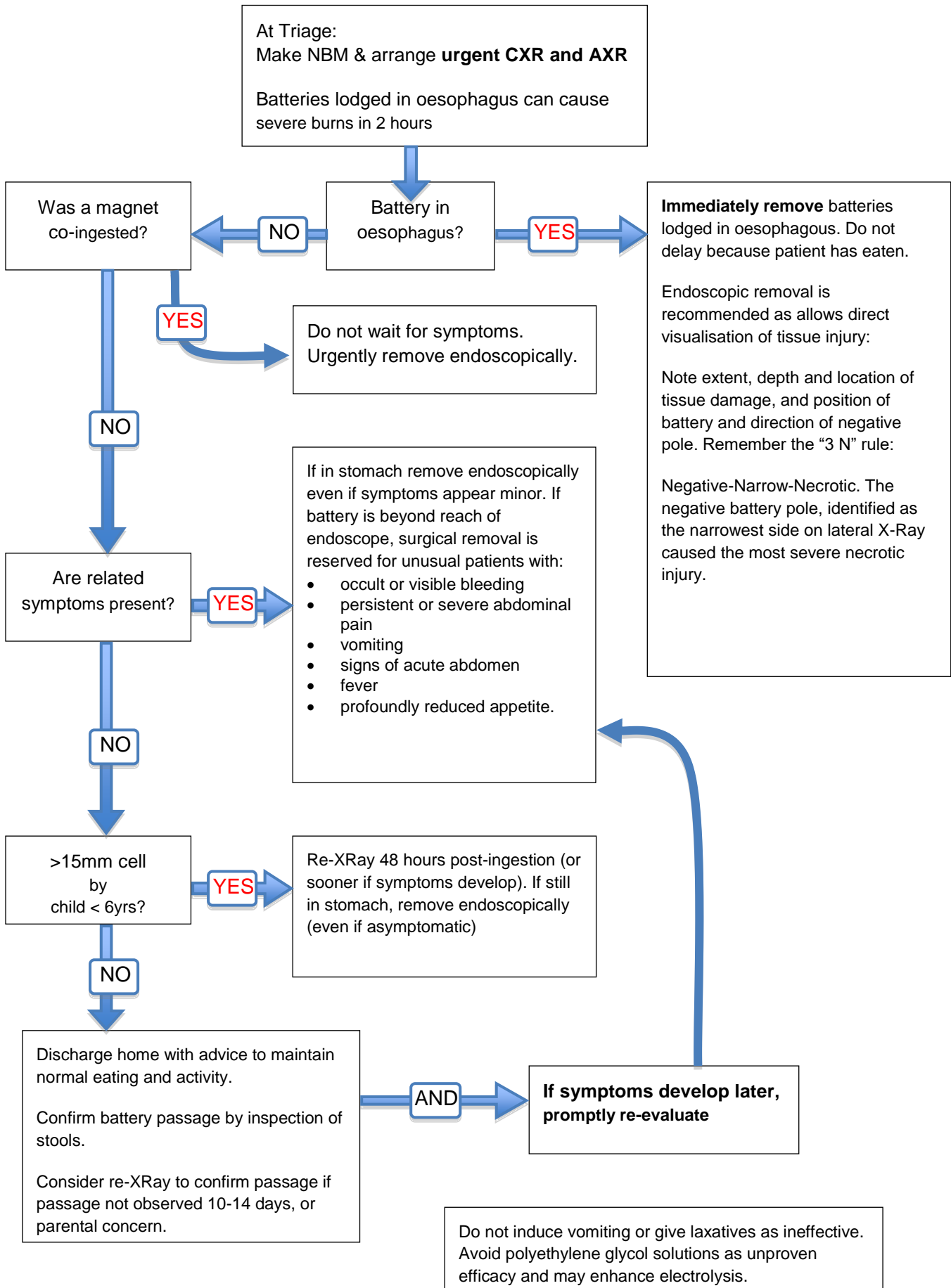
- Single magnet
- Tolerating oral diet
- Presented within 24 hours of ingestion
- No significant comorbidities
- Parent/carer able to observe child closely for deterioration (no need to inspect faeces)

All asymptomatic children who have ingested a single magnet require serial radiographs to track the progress of the magnet. Children who do not meet discharge criteria but are asymptomatic need admission for observation – discuss with paediatric surgical centre regarding most appropriate site. Symptomatic children need discussion with paediatric surgical team and may need urgent transfer to paediatric surgical centre.

Appendix 1: The investigation of children with suspected coin ingestion³.



Appendix 2: Button battery ingestion



Appendix 3: Magnet ingestion

