BUTTON BATTERIES

Serious injury leading to death can occur in less than 2 hours when young children swallow or insert button batteries.

Button batteries are found in common household items e.g. watches, toys, novelties, remote controls, car keyless fobs, hearing aids, musical greeting cards, and thermometers.

Symptoms caused by swallowing or inserting button batteries are often non-specific and can mimic common conditions when they become lodged in the GI tract, nose or ears. Extra vigilance is urged in children under 6 years especially pre-verbal toddlers under 3 years.

Potential battery exposure should be considered in patients with:

- Persistent or atypical croup
  a lodged battery can cause laryngeal oedema that mimics croup
- Chest pain
- Unexplained food refusal
- Unexplained GI bleeding
  melaena/haematemesis can precede aortic perforation
- Epistaxis
  oesophageal bleeding may exit via the nose
- Regurgitation or drooling
- Vomiting without fever or diarrhoea
  child may still vomit with battery lodged in oesophagus
- Fever
  a late sign that may indicate oesophageal perforation
- Unexplained nasal/ear or vaginal/rectal bleeding or discharge caused by an insertion

URGENT ACTION IS NEEDED
If you suspect a button battery ingestion or insertion immediately:

- order X-rays from neck to rectum to ensure battery ingestion can be ruled out
- targeted facial or pelvic views may be required for suspected insertions
- if battery found in neck or chest a lateral view is required to determine direction of negative pole
- report any positive x-rays immediately to the senior treating clinician

Button batteries usually appear as a metal disk with a radiolucent ring on x-ray, but variable film penetration can cause button batteries to resemble coins. If in doubt, urgently refer anyway.

REMEMBER: POOR OUTCOMES ARE ASSOCIATED WITH DELAYED DIAGNOSIS – X-rays looking for button batteries must be processed urgently.