



Button Battery: Small, disk-shaped batteries, commonly found in small electronic devices, watches and kids' toys.

Tissue damage can occur **as soon as 2 hours** after lodgment.

This is due to **current transmission** through mucosa, causing **burns and necrosis**.

Complications bowel **perforation** and **fistula formation** (fistulization to the aorta can cause massive hemorrhage).

PRESENTATION

HISTORY	PHYSICAL EXAM
<p>Witnessed vs. Unwitnessed ?</p> <ul style="list-style-type: none"> Lower threshold for intervention if unwitnessed (unknown duration = higher risk for damage/ complications) Parents may report seeing "shiny object placed in mouth" 	<p>Red Flag Symptoms </p> <ul style="list-style-type: none"> Vomiting, hematemesis, fever, respiratory distress <p>General</p> <ul style="list-style-type: none"> May be asymptomatic or appear unwell. <p>Gastrointestinal</p> <ul style="list-style-type: none"> Droping, dysphagia, abdominal pain <p>Respiratory</p> <ul style="list-style-type: none"> Stridor, cough, ↑ WOB
<p>Active or Sentinel Bleed </p> <ul style="list-style-type: none"> Sentinel bleed: hematemesis or melena in a patient with suspected or known button battery ingestion or post-button battery removal 	

INVESTIGATIONS AND DIAGNOSIS

All patients with suspected or confirmed button battery ingestion should receive **STAT imaging** with:

- Neck X-ray** (AP and lateral views)
- Chest X-ray** (AP and lateral views)
- Abdomen X-ray** (supine)

Differentiate button battery from coin on x-ray by:

- "**Halo sign**" – a radiolucent ring inside the outer edge of the object (Fig. 1B)
- Step-off** or **central bulge** on lateral view (Fig. 1C)

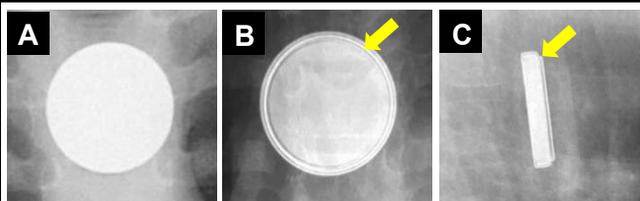


Figure 1: Button Battery on radiographs.

- A:** Coin in AP view
- B:** Button battery in AP view with halo sign
- C:** Button battery in lateral view with step-off

SYMPTOMS OF MUCOSAL DAMAGE OR MAGNET CO-INGESTION REQUIRE EMERGENT SURGICAL/ENDOSCOPIC MANAGEMENT.

- Unstable + active bleed? Resuscitate accordingly, imaging when stable and emergent to OR.**
- Sentinel bleeds may precede life-threatening hemorrhage. Obtain X-rays, if possible, but priority is surgical/endoscopic management.



MANAGEMENT OF STABLE PATIENTS WITH BUTTON BATTERY INGESTION

