

## INCLUSION CRITERIA

- Confirmed button battery foreign body in esophagus.

## EXCLUSION CRITERIA

- Non-button battery foreign bodies.

## MEASURES

- Time from ED arrival to OR arrival.
- Utilization of order set.
- Hospital length of stay.
- 48-hour return to ED.

### Management of Confirmed Esophageal Button Battery Foreign Body

- Perform endoscopy to assess for esophageal injury.
- Perform laryngoscopy/bronchoscopy if there is concern for airway injury, especially if negative pole of battery is facing anteriorly or if there are any airway-related symptoms.

#### Post-Removal

- If location of injury is in proximity to great vessels, consider CT angiography or MRI/MRA to evaluate for vascular injury.

#### If Suspicion for Perforation is Low

- Irrigate the esophageal injury with 50-150 ml of 0.25 sterile acetic acid.
- Remove excess fluid with suction.

#### Admit

- Admit.
- NPO, maintenance IV fluids.
- Consider Unasyn for: fever; unstable vital signs; mediastinal air; perforation; respiratory distress; or deep ulcer.
  - PCN allergy: give Clindamycin.

**Is injury  
close to the  
aorta?**

Yes

No

#### Next Step

- Esophagram to exclude leak.
- Consult Cardiothoracic Surgery.
- Continue NPO and Unasyn.
  - PCN allergy: give Clindamycin.
- Consider serial MRI until injury seen to recede from aorta.

#### Next Step

- Esophagram to exclude leak.
- Advance diet as tolerated when it is clear no esophageal perforation.

- If presence of hematemesis or UGI bleeding, assume aorto-enteric fistula and emergently prepare for thoracotomy with CT Cardiothoracic Surgery/ECMO.

#### Discharge

Discharge at provider's discretion.  
Consider repeat Esophagram at 1-2 weeks to evaluate for stricture or TEF.

**Disclaimer:** The clinical pathways are based upon publicly available medical evidence and/or a consensus of medical practitioners at Nemours Children's Health ("Nemours") and are current at the time of publication. These clinical pathways are intended to be a guide for practitioners and may need to be adapted for each specific patient based on the practitioner's professional judgment, consideration of any unique circumstances, the needs of each patient and their family, and/or the availability of various resources at the health care institution where the patient is located.

## VERSION MANAGEMENT

- Version 1.0 (10/29/25): Go Live.

Questions about this pathway should be directed to **[clinicalpathways@nemours.org](mailto:clinicalpathways@nemours.org)**.

## AUTHORS & REFERENCES

Central Florida Authors: Cedric Pritchett, Pablo Palomo, Floyd Livingston, Kamal Chavda, Lisa Delozier, Judit Szolnoki, Nick Poulos

Delaware Valley Authors: Nicole Aaronson, Erika Kutsch, Lauren Greenawald, Robert Heinle, Monique Devens, Theresa Moore, Lynda Arai, Kelly Pruden

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