BATTERY MANAGEMENT GUIDELINE FOR DGH AND RHCYP EMERGENCY IN UNDER 16s

BATTERY ABOVE STERNAL NOTCH – REFER TO YOUR ENT ON CALL SERVICE

BATTERY BELOW STERNAL NOTCH

REFER TO RHCYP SURGICAL REGISTRAR (BLEEP 9103) OR VIA SWITCHBOARD 0131 536 0001 FOR OUT OF HOURS REFERRALS*

IF RHCYP SURGICAL REGISTRAR UNAVAILABLE PLEASE DISCUSS WITH SURGICAL CONSULTANT. IF UNAVAILABLE DISCUSS 0900 – 1630 HRS WITH GI REGISTRAR (BLEEP 9434) OR GI CONSULTANT ON SERVICE (VIA SWITCHBOARD)

WHAT TO DO

Don't hang around, no delays!

Low dose (fluoroscopy or low-dose x-ray) imaging of the neck, chest, abdomen and pelvis should be the first option to assess position. If these are not available, a CXR and AXR may be required and consider other imaging and intervention depending on symptoms and information / clinical assessment).

WHAT TO DO IF IT IS AN OESOPHAGEAL BATTERY

Assess the patient using ABC. ANY WORRYING SYMPTOMS?

Alert the family this will require emergency endoscopic removal. Get in touch with the RHCYP team (as detailed).

Obtain IV access and give IV BUSCOPAN – see Appendix 1

If a battery can be moved into the stomach it is safer and less urgent or may avoid further intervention – this can be decided later.

Get the family to check which type and for size comparison. Get as much information as soon as possible on what the FB was if in doubt. Measure the battery on the x-ray.

If you have taken a call from home, management (only in those over age 12 months) is HONEY – DOSE IS 10MLS (2 TSPS) EVERY 10 MINUTES FOR 6 DOSES and for the family to attend ED as soon as possible. Honey is also an option in the ED.

In the ED /ward setting, SUCRALFATE should be administered and should be available in hospital ED or paediatric ward.

SUCRALFATE SUSPENSION DOSE IS 1g EVERY 20 MINUTES FOR 3 DOSES

APPENDICES

APPENDIX 1

BUSCOPAN

https://bnf.nice.org.uk/drug/hyoscine-butylbromide.html

With intravenous use in children

For *intravenous injection*, may be diluted with Glucose 5% or Sodium Chloride 0.9%; give over at least 1 minute.

By intramuscular injection, or by intravenous injection

- **For Child 1 month–4 years** 300–500 micrograms/kg 3–4 times a day (max. per dose 5 mg).
- **For Child 5–11 years** 5–10 mg 3–4 times a day.
- **For Child 12–17 years** 10–20 mg 3–4 times a day.

APPENDIX 2

U.S. DETAILED MANAGEMENT GUIDANCE

https://www.poison.org/battery/guideline

REFERENCES

Diagnosis, Management, and Prevention of Button Battery Ingestion in Childhood: A European Society for Paediatric Gastroenterology Hepatology and Nutrition Position Paper. Mubarak A, Benninga MA, Broekaert I, Dolinsek J, Homan M, Mas E, Miele E, Pienar C, Nikhil Thapar N, Thomson M, Tzivinikos C, de Ridder L. Journal of Pediatric Gastroenterology and Nutrition 2021; 73 129-136.

Mitigating Risks of Swallowed Button Batteries: New Strategies Before and After Removal. Lerner, DG, Brumbaugh D, Lightdale J, Jatana KR, Jacobs I N, Mamula P. Journal of Pediatric Gastroenterology and Nutrition: 2020; 70 542-546.