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Endoscopic Removal of Safety Pin from Appendiceal Orifice

Alex Biller
Children's Mercy Kansas City

Moises Alatorre-Jimenez
Children's Mercy Kansas City

Jeremy Stewart
Children's Mercy Hospital

Ruba A. Abdelhadi
Children's Mercy Hospital

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Alex Biller, DO; Moises Alatorre-Jimenez MD, PhD; Jeremy Stewart, MD; Ruba Abdelhadi, MD

Children's Mercy Kansas City

Background

- Foreign body ingestion in children is a common occurrence in Emergency Departments
- 1,500 deaths annually from foreign body ingestion
- Safety pin ingestions are mostly reported in the upper GI tract
- Few cases reported of safety pins stuck in the appendix

Additional Images

Presentation

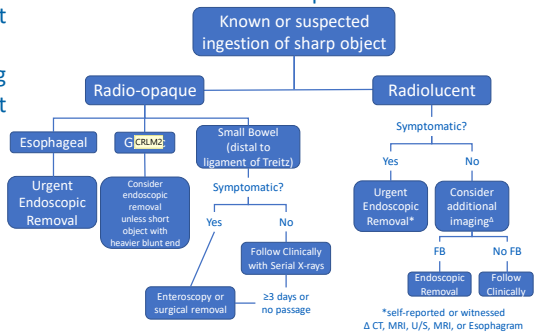
- 5-year-old previously healthy Female
- Accidentally ingested **OPEN** safety pin
- Asymptomatic at presentation and during the course of admission
- **Admitted for**
  - Serial KUBs
  - PEG-3350 clean-out initiated by surgery consultation
- **Day 3 – Unchanged position on KUB**
  - Colonoscopy with foreign body removal
  - Open safety pin in the appendiceal orifice with sharp point in cecum
  - **Removed safely with a Rat Tooth grasper**

Discussion

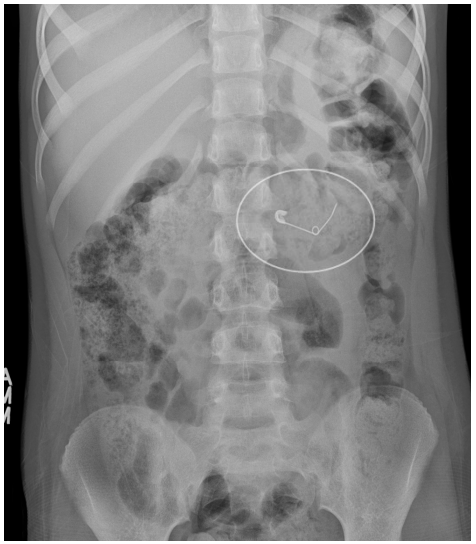
- Literature supports that safety pins passed through the duodenum can pass spontaneously
- Metallic foreign body in the appendix are rare
- Benizri et al. reported a case of a 29-year-old with a metallic foreign body in the RLQ on abdominal X-ray who required surgical removal after the team was unable to extract the object by colonoscopy one month later
- Early serial x-rays for progression monitoring with endoscopic intervention could prevent need for surgical removal

Teaching Points

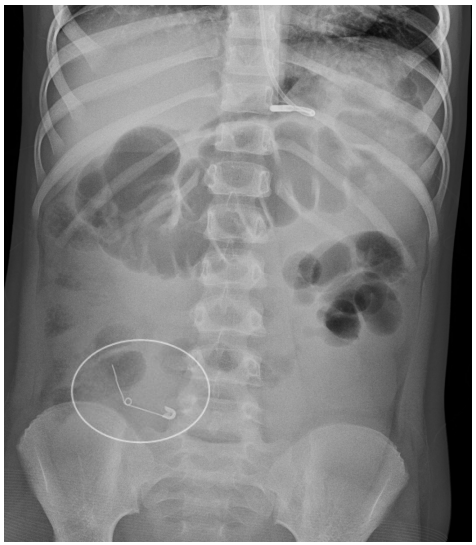
- Sharp foreign body removal should occur emergently in symptomatic patients and within 24 hours in asymptomatic patients
- May require surgical intervention if failure to progress after 3 days of serial x-ray
- Failure to progress on serial x-ray could indicate need for endoscopic removal



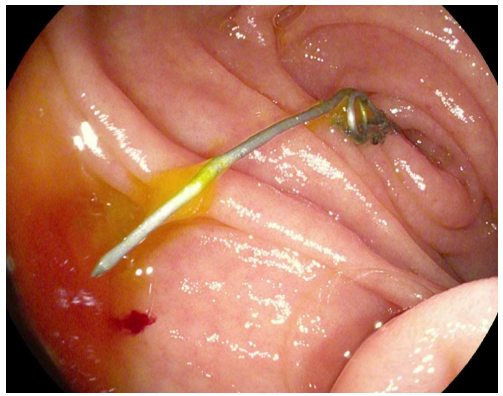
Presentation



Day 1



Day 3



Colonoscopy Day 3

UMKC School of Medicine

KU School of Medicine, The University of Kansas

References

Children's Mercy Kansas City