TASK FORCE ON CADMIUM IN CHILDREN'S JEWELRY: FOREIGN BODY INGESTION

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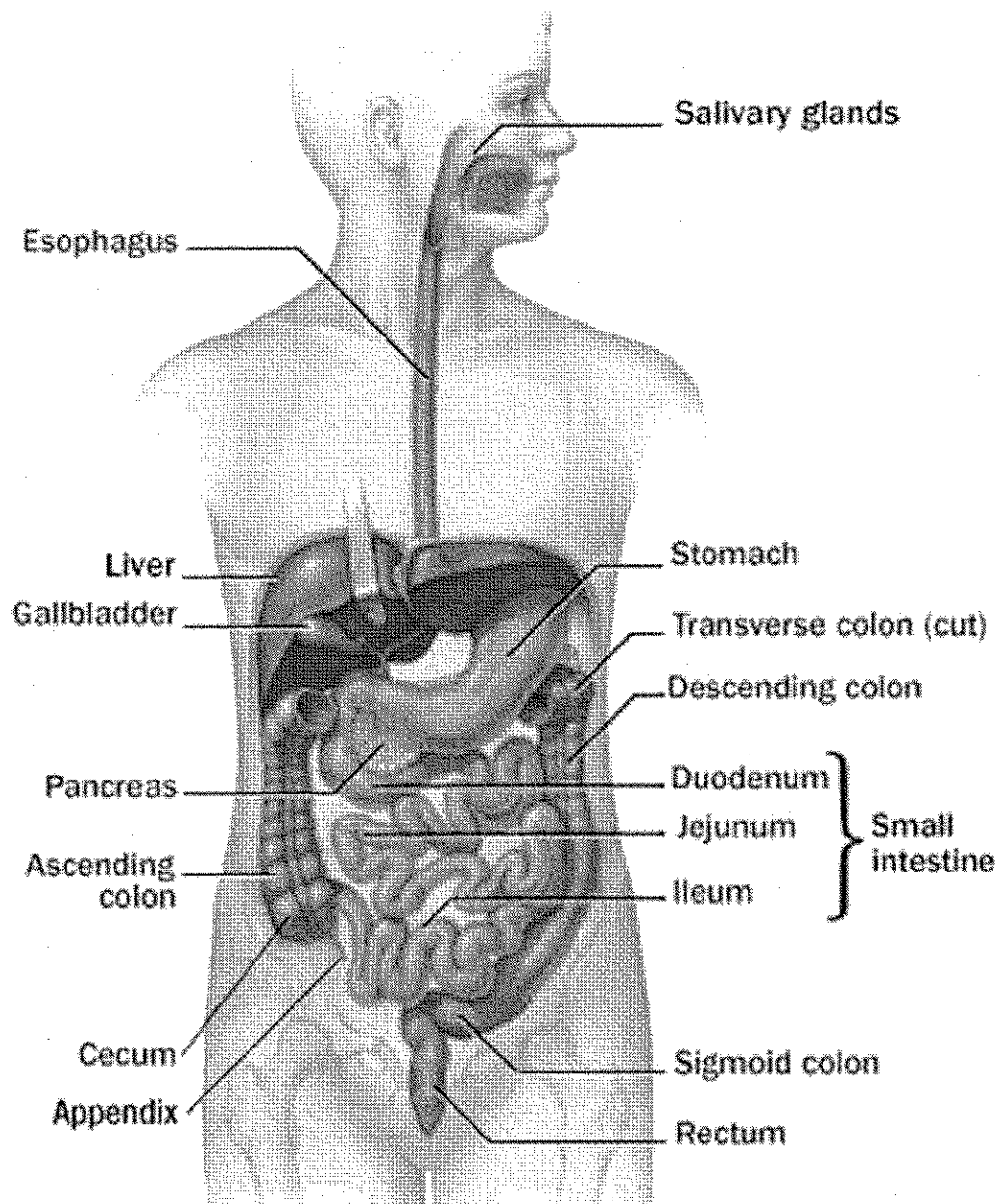University of Connecticut Health Center
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Topics Reviewed

- Frame speaker's background and expertise
- Explain path and timing of foreign body (FB) ingestion
- Explain anatomic catches in FB ingestion and brief common removal techniques
- Discuss common substances ingested and related toxicity
- Therapy considerations

Background

- I am a clinical adult gastroenterologist with limited experience in toxic pharmacology but have expertise in ingested foreign bodies including types of substances, complications, and treatments.

Normal ingestion

- Rapid esophageal transit
- Gastric emptying is 80-90% in 2 hours
- Small bowel transit is about 90 minutes or 1 ½ hours
- Colonic transit is about 24-48 hours.

Salivary glands

Esophagus

Liver

Gallbladder

Stomach

Transverse colon (cut)

Descending colon

Pancreas

Duodenum

Jejunum

Ileum

Small intestine

Ascending colon

Cecum

Appendix

Sigmoid colon

Rectum

Catch Points of Foreign Bodies

- Upper and lower esophagus
- Upper esophagus: Elderly patients' dentures, utensils, bones, toothpicks
- Lower esophagus: Food most common, "Porter House Steak Syndrome" from reflux/tumor strictures
- Stomach: Coins, pens, toothbrushes, long narrow objects
- Small bowel: buttons and batteries (Mercury)
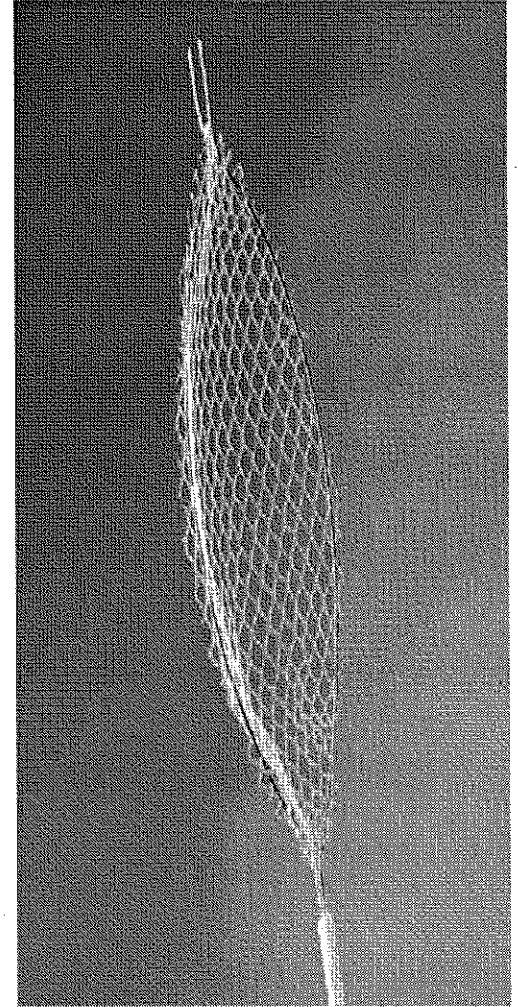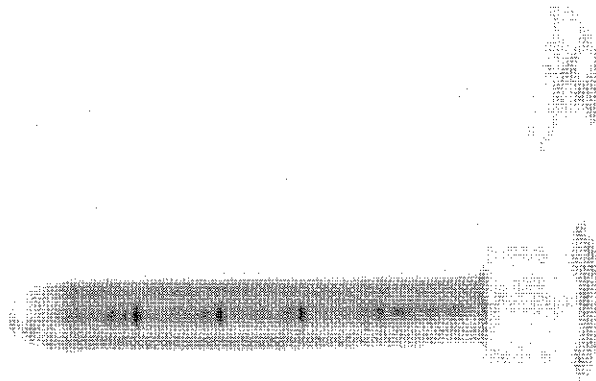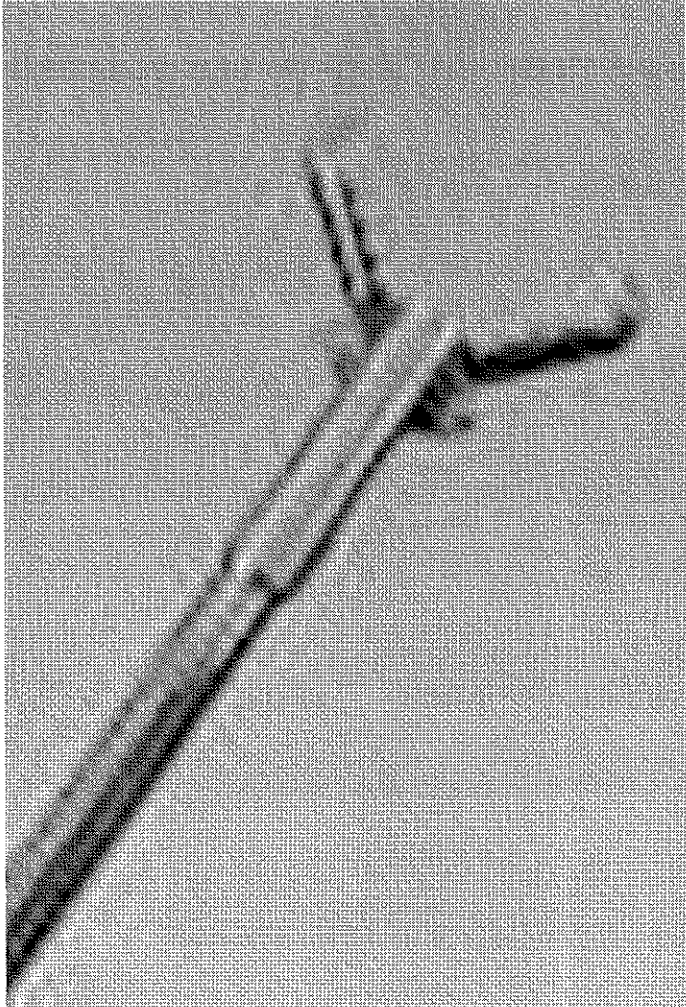- Colon: "Body Packers", drug smugglers

Ingested items that need Removal

- Coins: Quarters need removal , pennies, dimes and nickels small enough to pass

- Buttons, marbles, toys: Often need removal if greater than 2.5 cm

- Batteries: All need removal because of leakage of toxic elements

- Most sharp objects + objects longer than 6 cm need removal

Therapy

- First thing to remember is about 80% of ingested foreign bodies pass on their own.

- If the ingested foreign body remains in stomach for more than 10 days removal is indicated.

- Treatment of choice is endoscopy if within reach.

Removal Devices

Conclusions

- 80% of ingested foreign bodies pass on their own

- Certain foreign bodies need removal: batteries (toxic), long objects (ability to pass), sharps (can cause damage to GI tract)

- Endoscopy often the best way to remove foreign bodies.

Questions ?