



Gastric Lap Band Erosion

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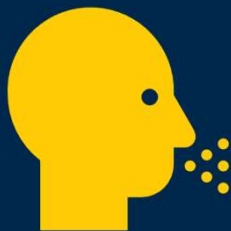
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History

A 46 yr-old female with a history of bariatric surgery in 2009 presented with 4 days of abdominal pain that radiates to the back, nausea and persistent emesis. She felt like her “lap band slipped”.

CT scan at outside hospital showed lap band “in the small intestine”. She was told to follow-up with bariatric surgery, however her symptoms worsened so she came to the ED.



Physical Exam



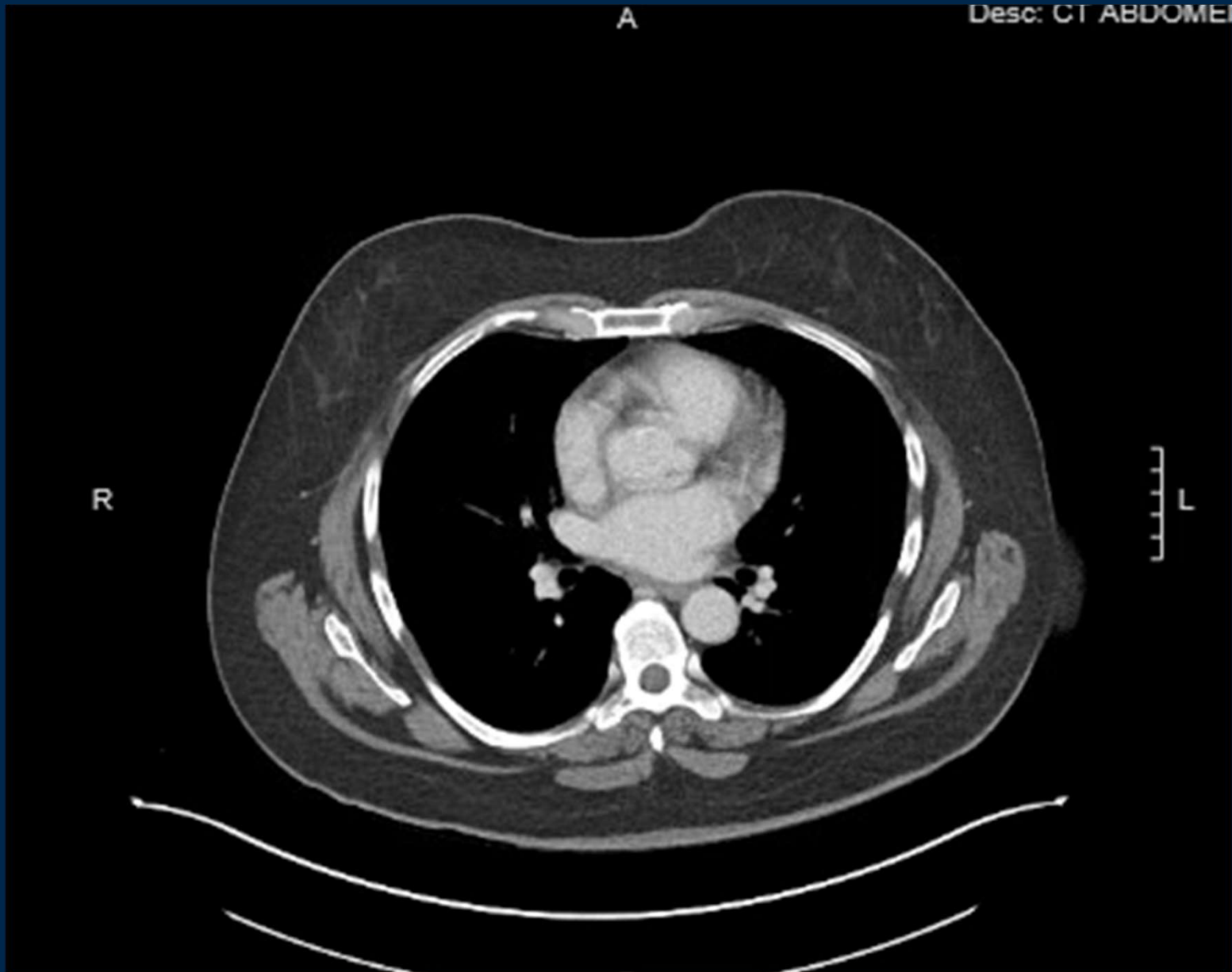
- Physical exam: Abdomen
 - Abdomen soft, non-distended
 - Tender in LUQ and epigastrium
 - No rebound or guarding
 - Absent bowel sounds in all 4 quadrants



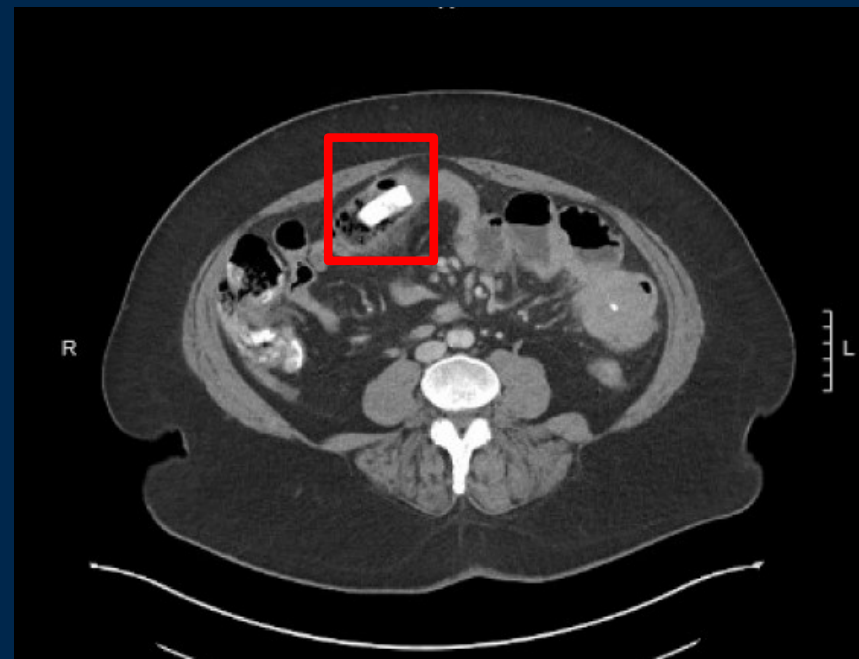
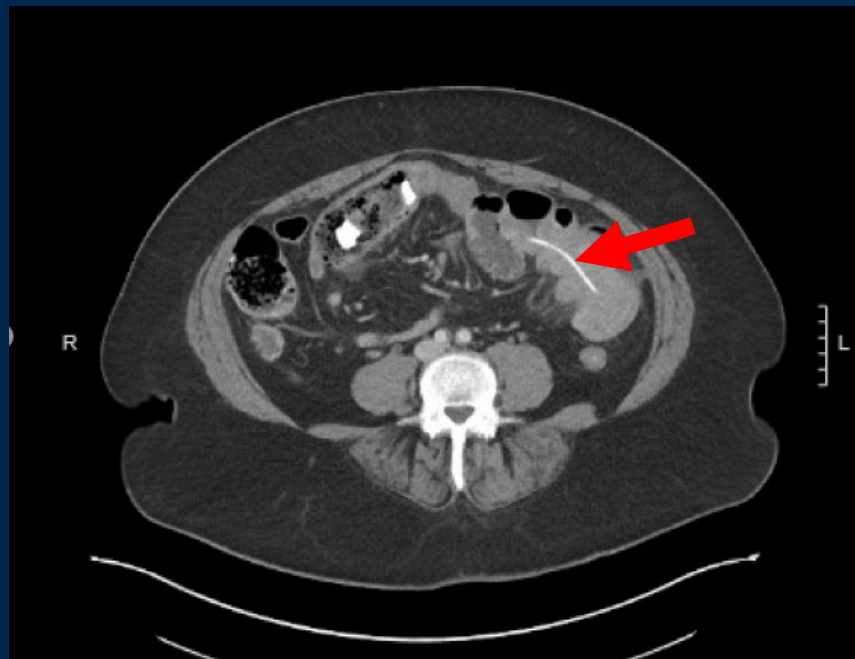
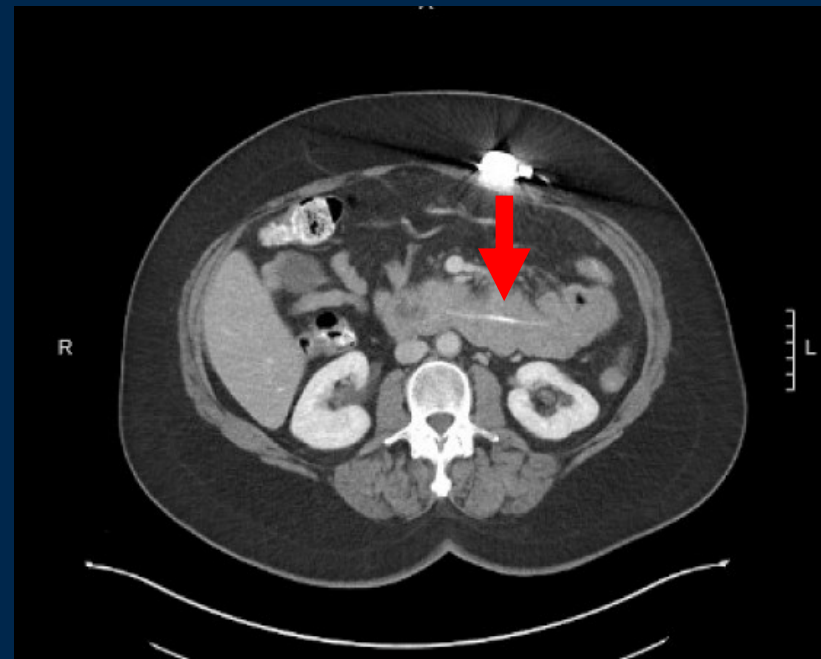
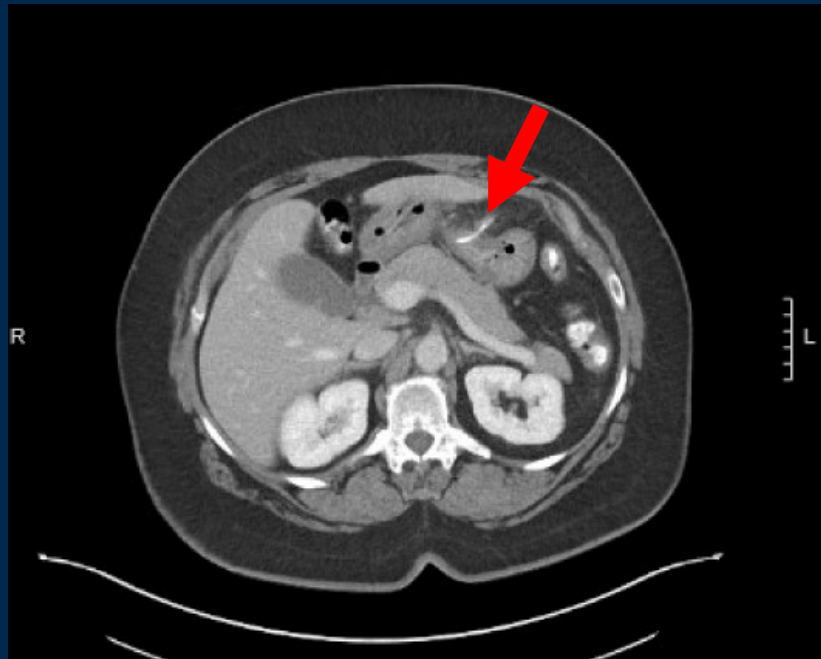
- ED course
 - WBC 13.8
 - 2L of LR and morphine for pain control
 - Normal lactate, liver panel, and lipase

→ CT Abdomen & Pelvis ordered

CT Abdomen/Pelvis with Contrast



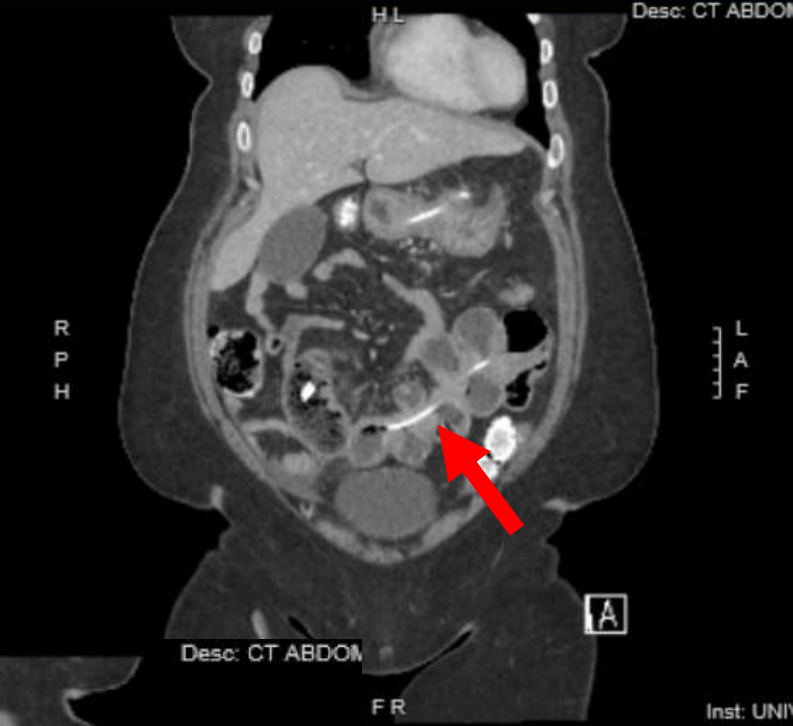
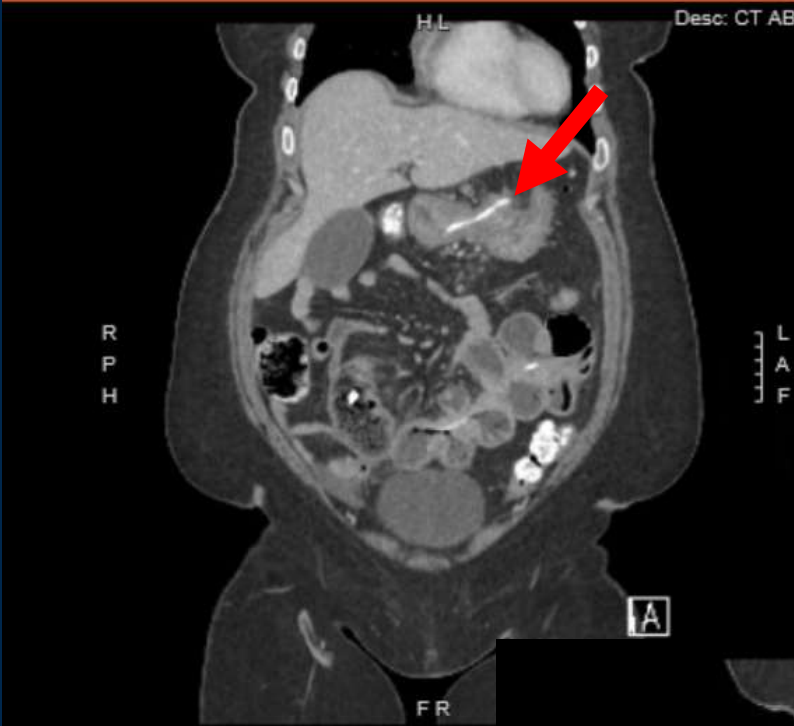
CT Abdomen/Pelvis with Contrast



CT Abdomen/Pelvis with Contrast



CT Abdomen/Pelvis with Contrast

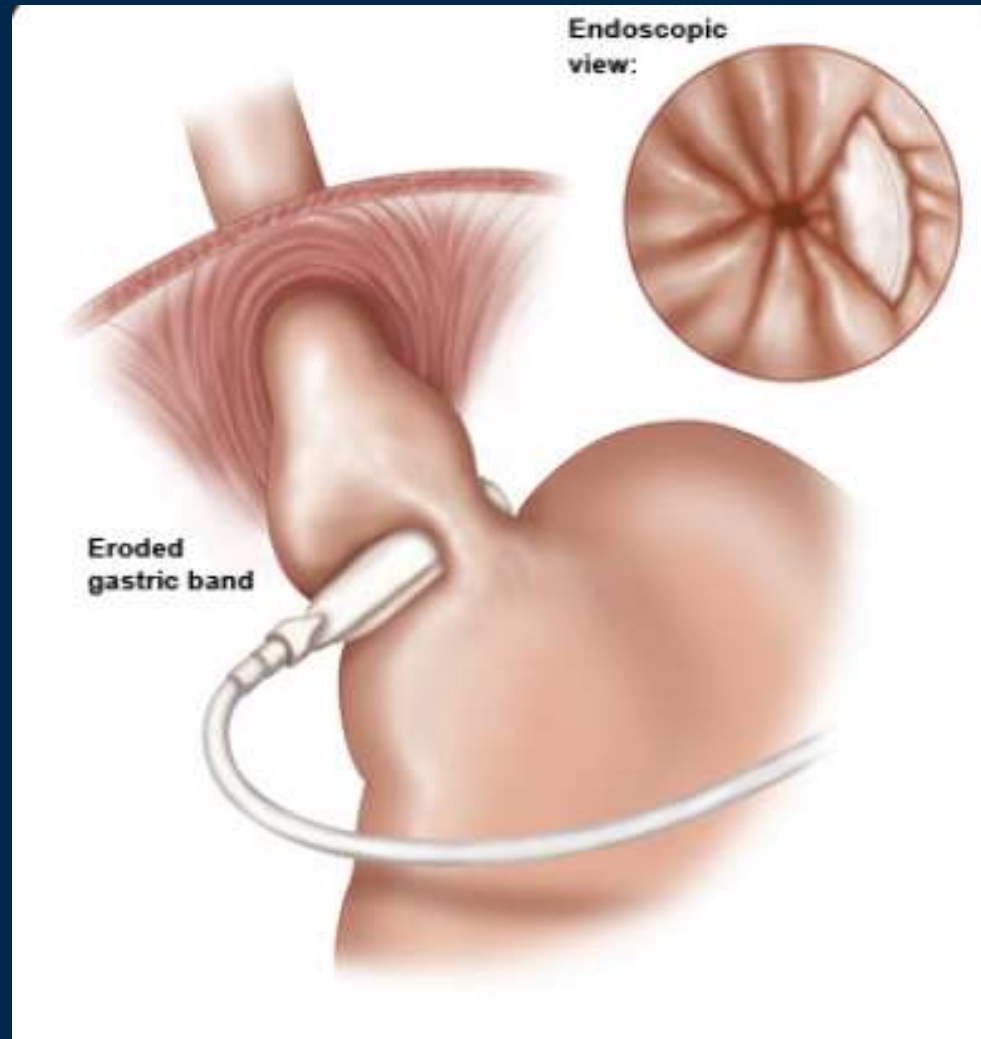


CT Findings Summary

- Gastric band eroded through wall of stomach
- No peri-gastric fat stranding
- Inflation tubing is intra-jejunal
- Distal gastric band seen in small bowel in RLQ
- Dilated small bowel (3.6cm)
- Decompressed distal small bowel

Diagnosis

- Eroded adjustable gastric lap band with resulting partial small bowel obstruction



<http://www.commonweight.com/band-removal.htm>

Management

1

Surgical removal of lap band

2



Gastric Lab Band Erosion



Incidence (2, 3)

0%-5.8%

Why does it happen?

(1,2,3)

Chronic ischemia from
pressure

Subclinical gastric wall
injury during placement

Overtightening

Infection or inflammatory
reaction



Presentation (2,4)

Abdominal pain
Nausea, Vomiting
Weight re-gain
Rarely peritonitis
Asymptomatic

Gastric Lap Band Erosion



Imaging if erosion is suspected:

- Upper GI fluoroscopy ⁽⁵⁾
- CT depending on symptoms



Treatment ⁽²⁾

- Laparoscopic band removal



Complications ⁽³⁾

- Abscess formation, peritonitis, and tube course infection

Resulting SBO

- Case reports of SBO due to band erosion and migration (6,7,8)
- Abdominal plain film is reasonable first step in work-up
- CT scan can define exact location of band (9)

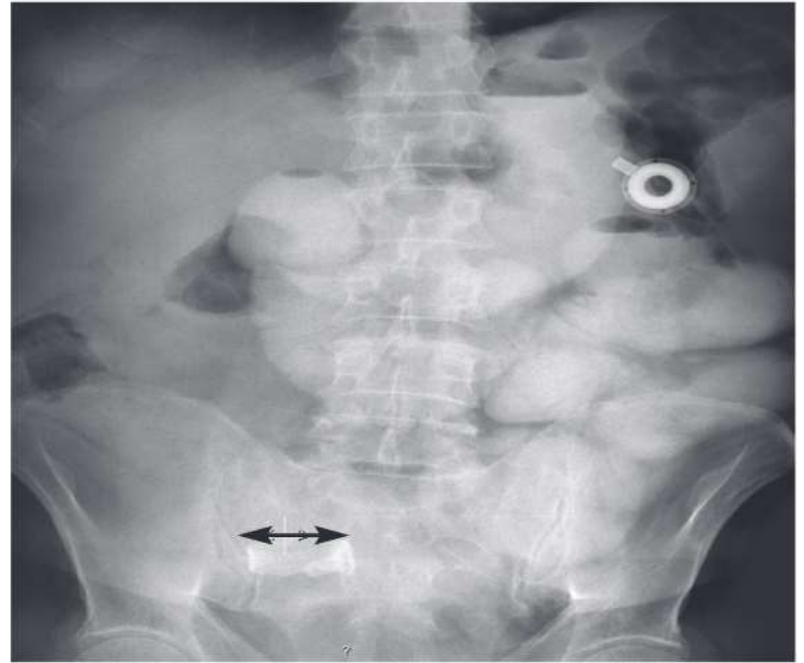


Figure 2. Abdominal X-ray with the band in the lower abdomen (under arrows) and the port-chamber at proper location, shows dilated small-bowel loops filled with the contrast remaining from the Gastrografin® swallow, indicating small-bowel obstruction.

Bueter et al

Role of Imaging



Radiologic diagnosis (4):

Plain Film

UGI Fluoroscopy

CT Abdomen/Pelvis



Fig. 4

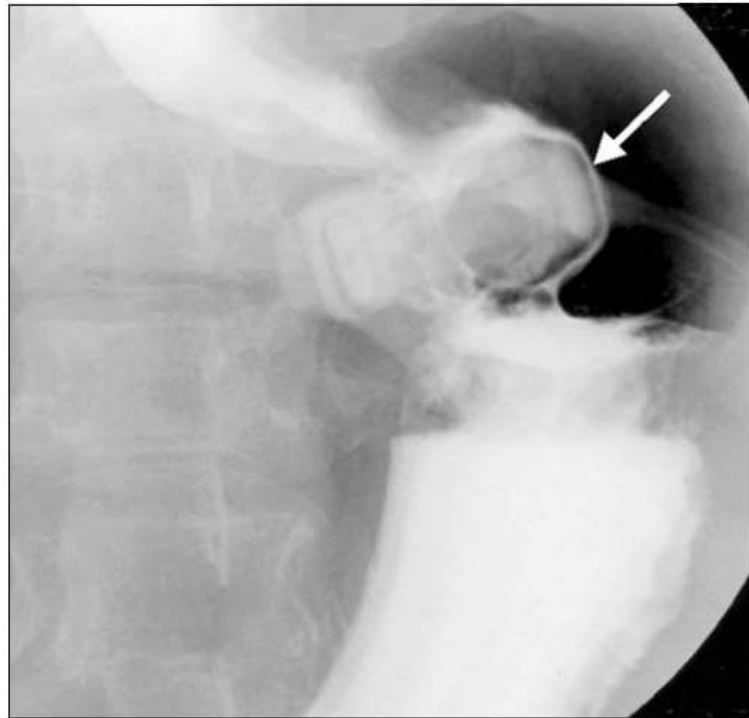
Band erosion as identified on endoscopic retroflexion.

Most commonly
diagnosed with
upper
endoscopy (2)

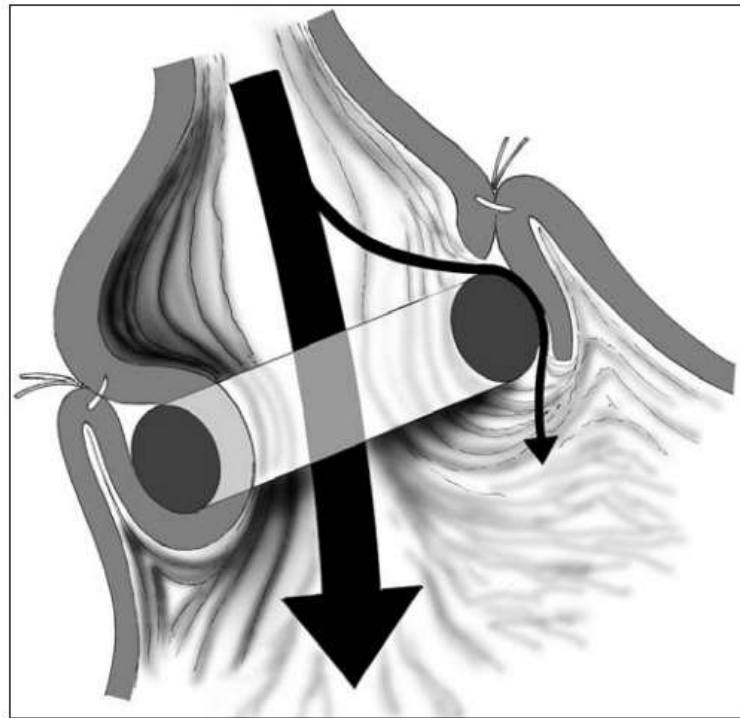
Water-soluble contrast: helps
determine complete erosion

Definitive diagnosis:
visualization of any portion of
the band in continuity with the
gastric lumen

Role of Imaging: UGI Findings



A



B

Fig. 1.—Intragastric band erosion in 23-year-old woman.

A, Radiograph from upper gastrointestinal series shows characteristic appearance of intragastric band erosion. Note contrast material on both sides of penetrating portion of band (*arrow*).

B, Drawing of radiographic findings shown in **A** illustrates passage of contrast material through stoma of band (*large arrow*) and around left section of band that has eroded into stomach (*small arrow*). Note normal aspect of right section of band with gastric fundus wrapped around it.

Pathognomonic: contrast material surrounding the part of the band that lies in the lumen of the stomach (1)

Role of Imaging: CT findings



A



B

Fig. 3.—Intragastric band erosion in 26-year-old woman.

A, Axial CT scan obtained at level of stomach shows abscess (*arrow*) around gastric wall.

B, Axial CT scan obtained near level of access port shows inflammatory reaction along catheter (*arrow*) and in anterior gastric wall.

CT findings suggestive of this complication: May see extraluminal air or periprosthetic infection (e.g., fluid collection) is found ⁽¹⁾

Take Home Points

1. Radiologists should look for this complication especially in patients without symptoms or with non-specific abdominal symptoms
2. May be diagnosed with endoscopy, abdominal radiograph, UGI fluoroscopy, or CT
3. Often diagnosed on CT incidentally because of the common insidious onset
4. Next step: surgical consult and removal of the lap band



Thank you!

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