CIRA Case of the Week November 2016

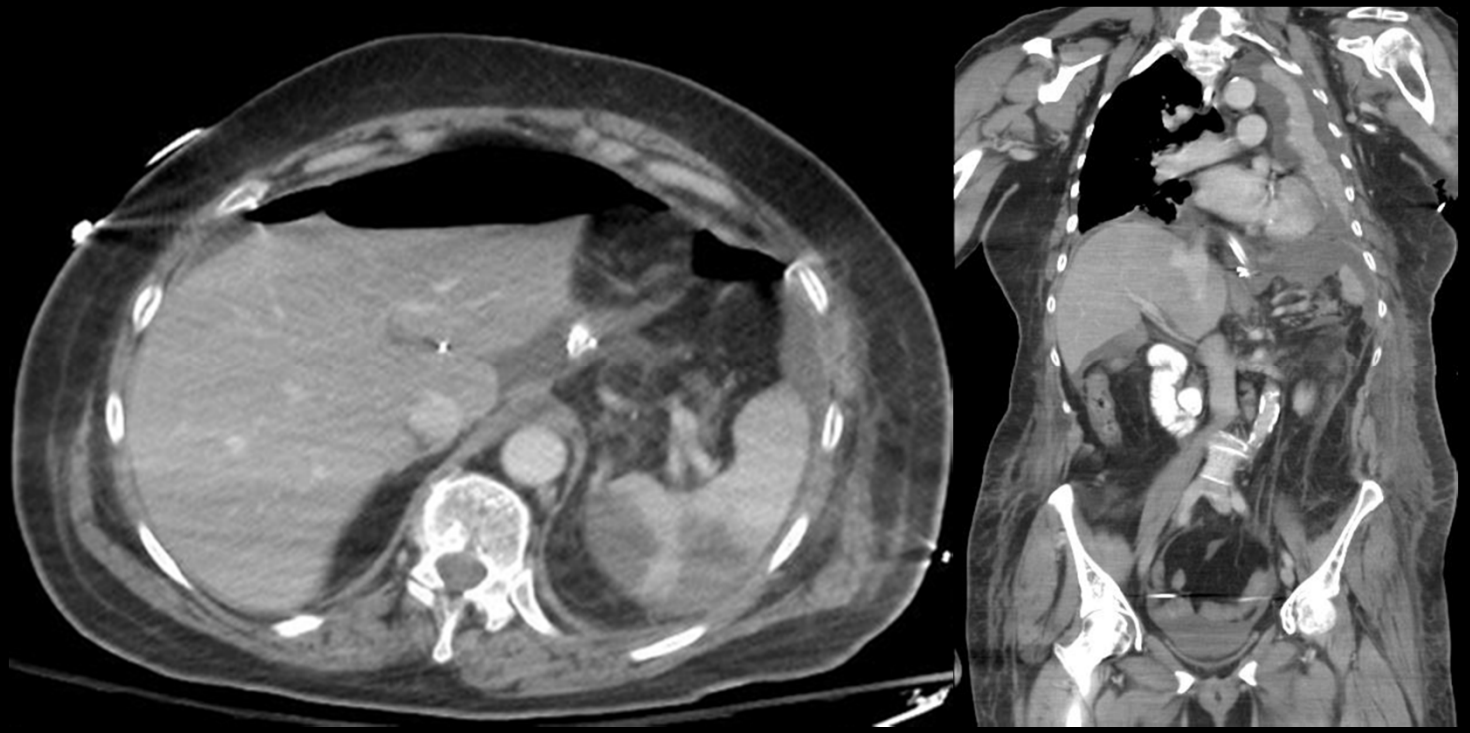
Case courtesy of Drs. O. Mironov and E. Shlomovitz
Toronto General Hospital

History

- 69 year old woman presented with hemoptysis to an outside hospital
- Diagnosed with gastric cancer at the GE junction
- Semi-urgent proximal partial gastrectomy and distal esophagectomy were performed
- Postoperative course complicated by respiratory failure in the setting of septic shock
- The patient was transferred to the ICU, intubated and ventilated
- She was also placed on inotropes for accompanying decompensated heart failure

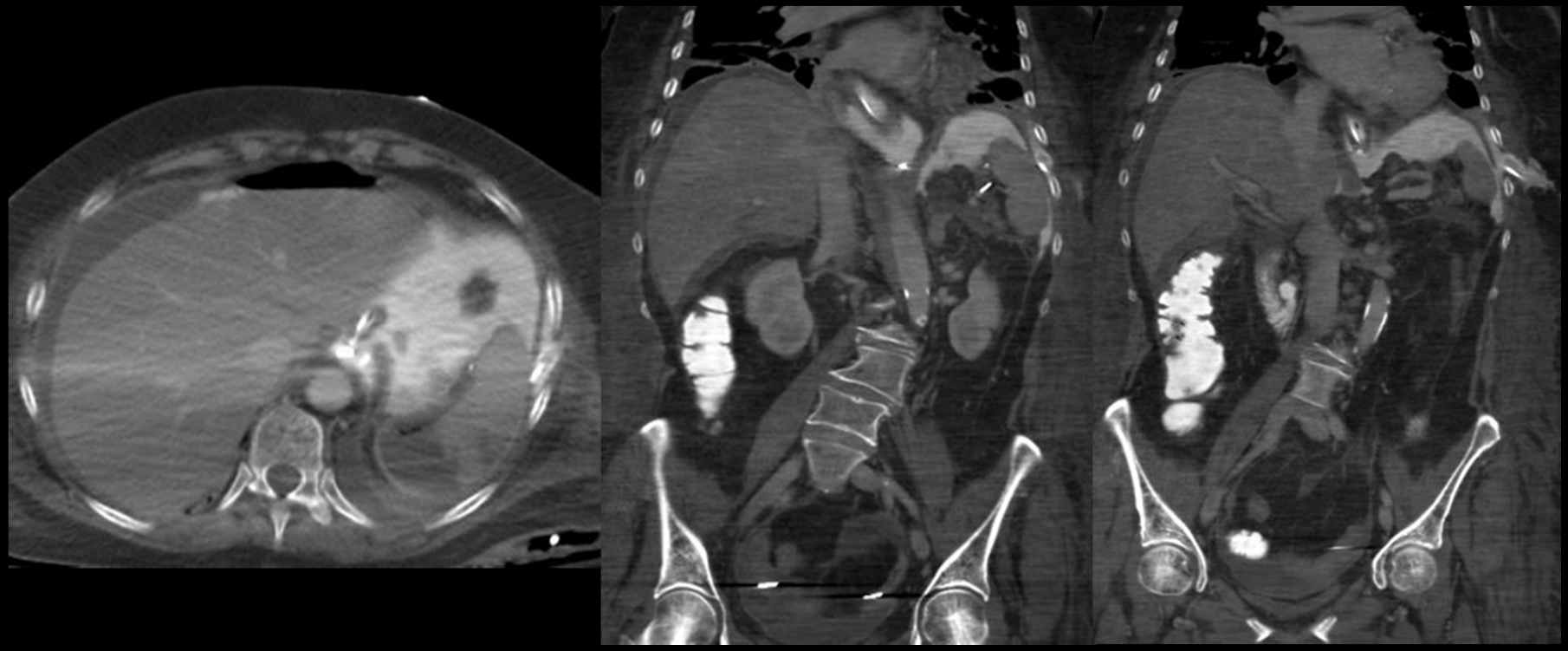
Initial CT

- CT demonstrated a collection around the anastomosis, the likely cause of sepsis



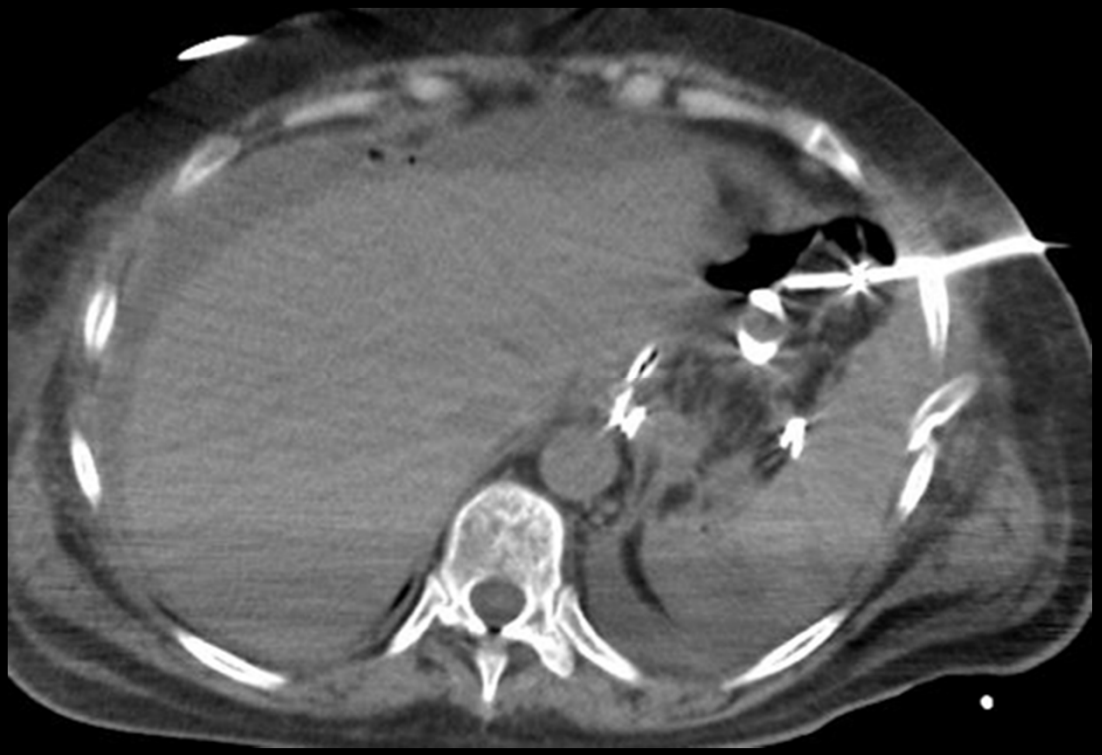
Repeat Imaging

- A repeat CT was performed a few days later demonstrating complete disruption of anastomosis and spillage of gastric/esophageal contents



Initial Drainage

- A 10 Fr drain was placed into the collection under CT guidance. The collection was drained.



Upper Endoscopy

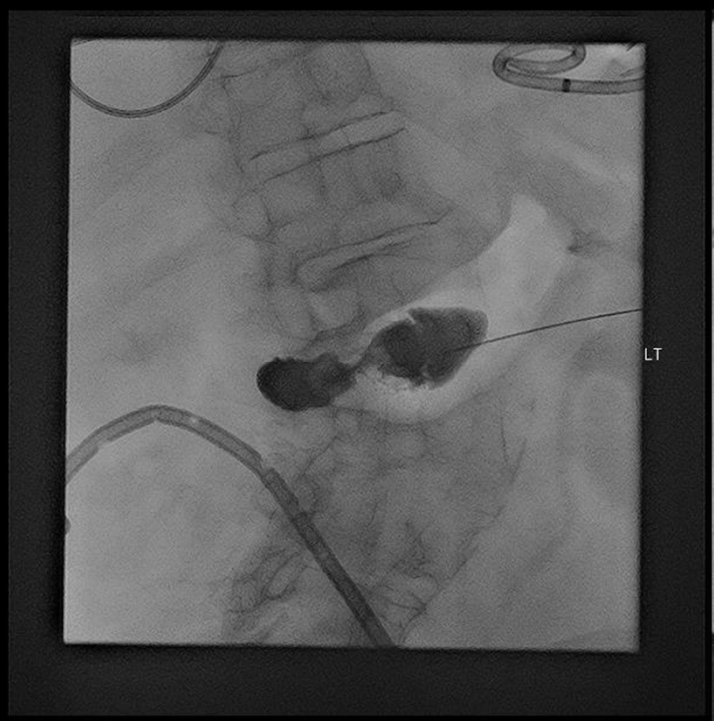
- Upper endoscopy was performed 1 week later. This also demonstrated disconnection of the stomach at the level of the anastomosis. The endoscopist was unable to see or advance into the stomach itself. Adequate source control could not be achieved despite upsizing the drain to 20 Fr.

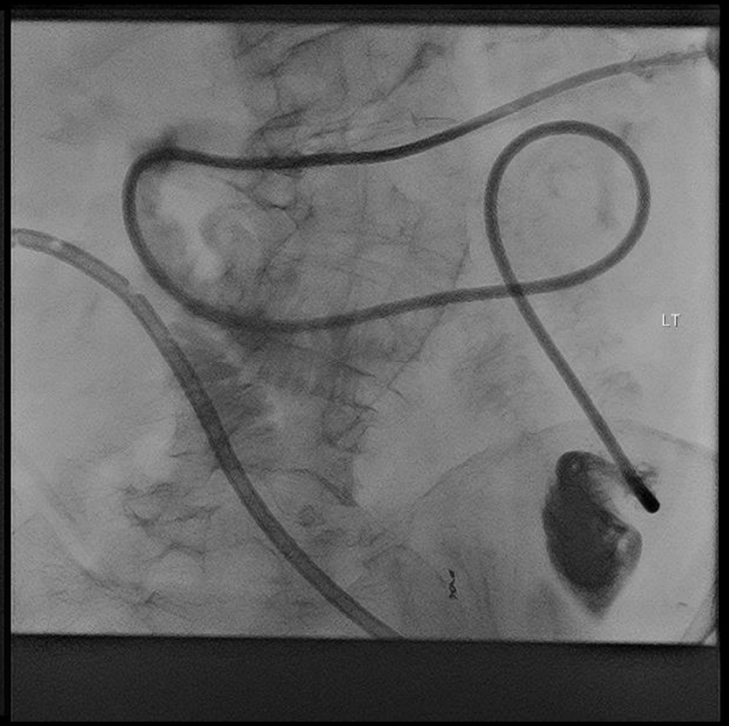
Clinical Course

- The patient's clinical course was complicated by multiple events
  - pneumonia
  - pulmonary emboli requiring anticoagulation
  - rectus sheath hematoma in the setting of anticoagulation which was embolized
  - failure to thrive

GJ tube

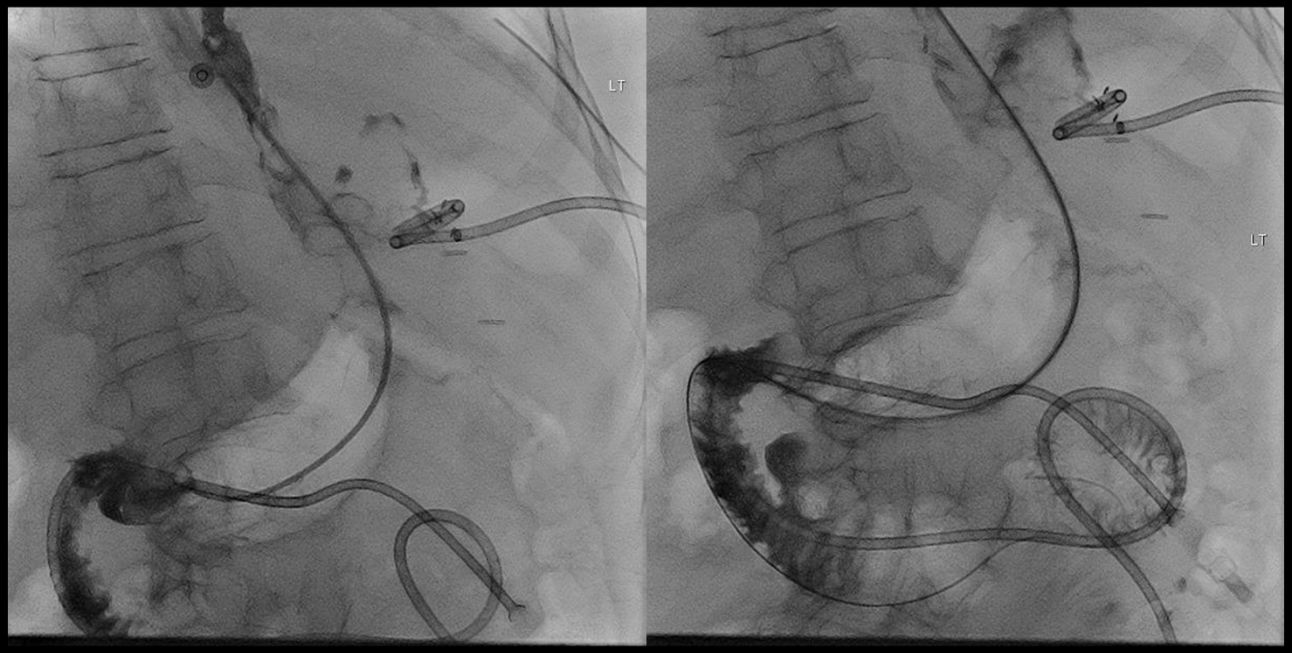
• Because of the anastomotic disruption a percutaneous 12Fr gastrojejunostomy tube was placed into the partially detached distal stomach under ultrasound and fluoroscopic guidance to allow for enteral nutrition.





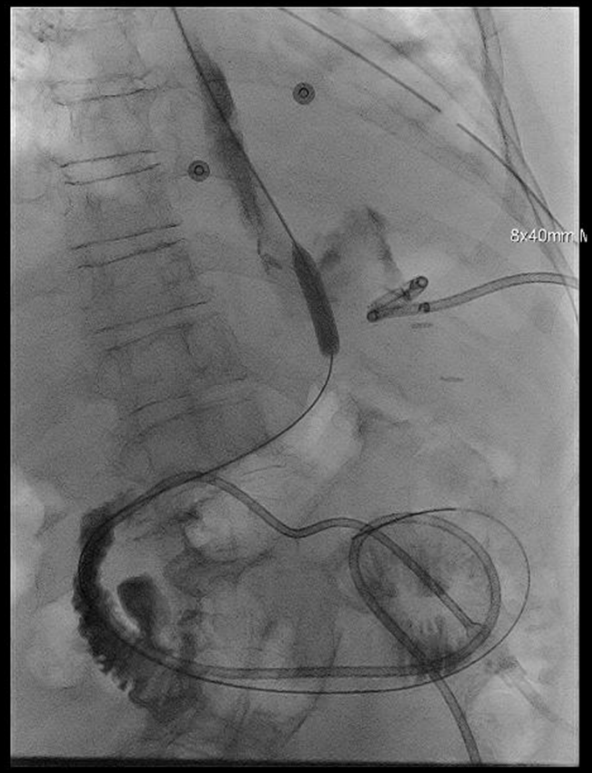
Gastroesophageal Stent

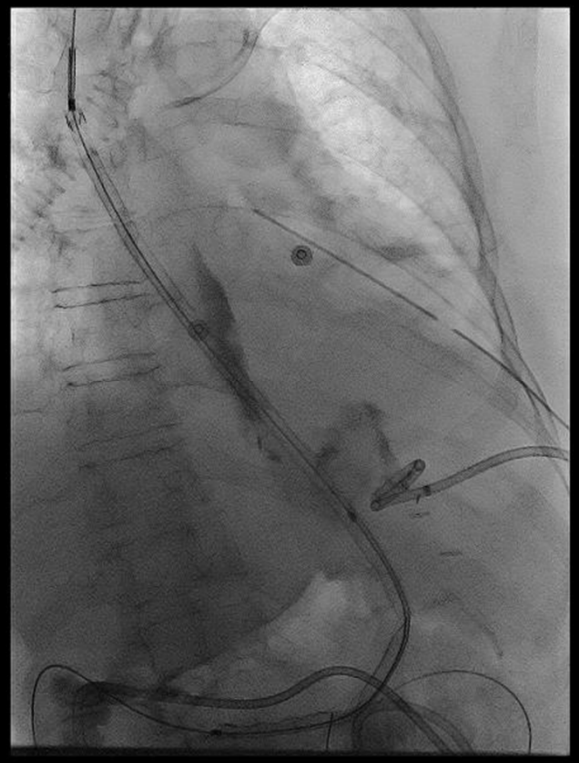
•In consultation, esophageal stenting was chosen to improve source control and ongoing leakage.
•Under sedation an angled glide wire and 7Fr MPA catheter were guided from the mouth to the jejunum. The wire was exchanged for a 0.035 Lunderquist wire.



Gastroesophageal Stent

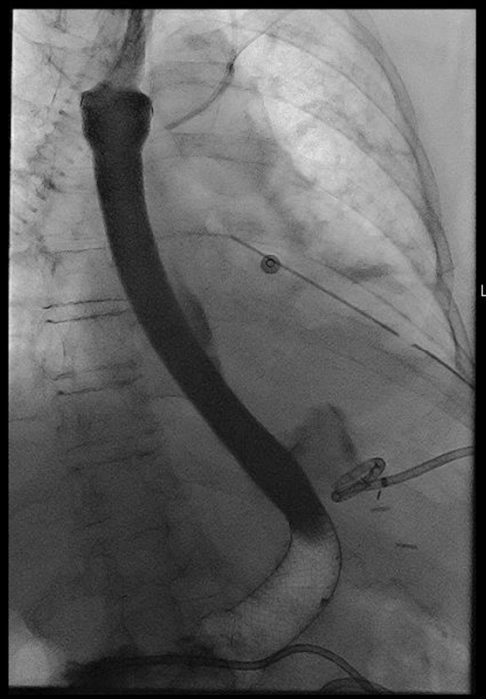
• The stent could not be initially passed the distal esophagus due to stricture so an 8x40 Mustang balloon was used to plasty, followed by successful stent passage





Gastroesophageal Stent

• A covered esophageal stent (36 mm distal end; 28 mm proximal end; 23 cm long) was advanced and placed with its distal end in the region of the pylorus. Contrast was passed through the lumen into the duodenum confirming exclusion of the leak

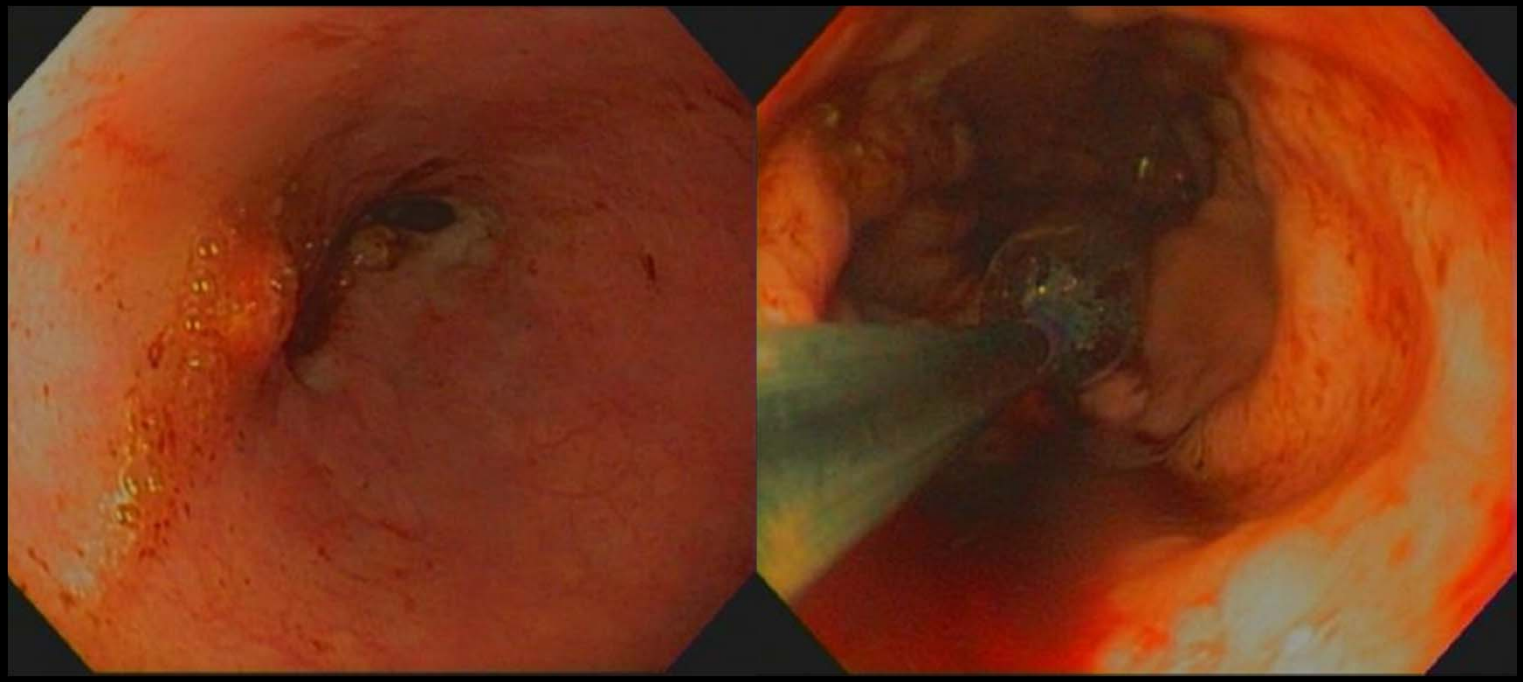


Postop Course

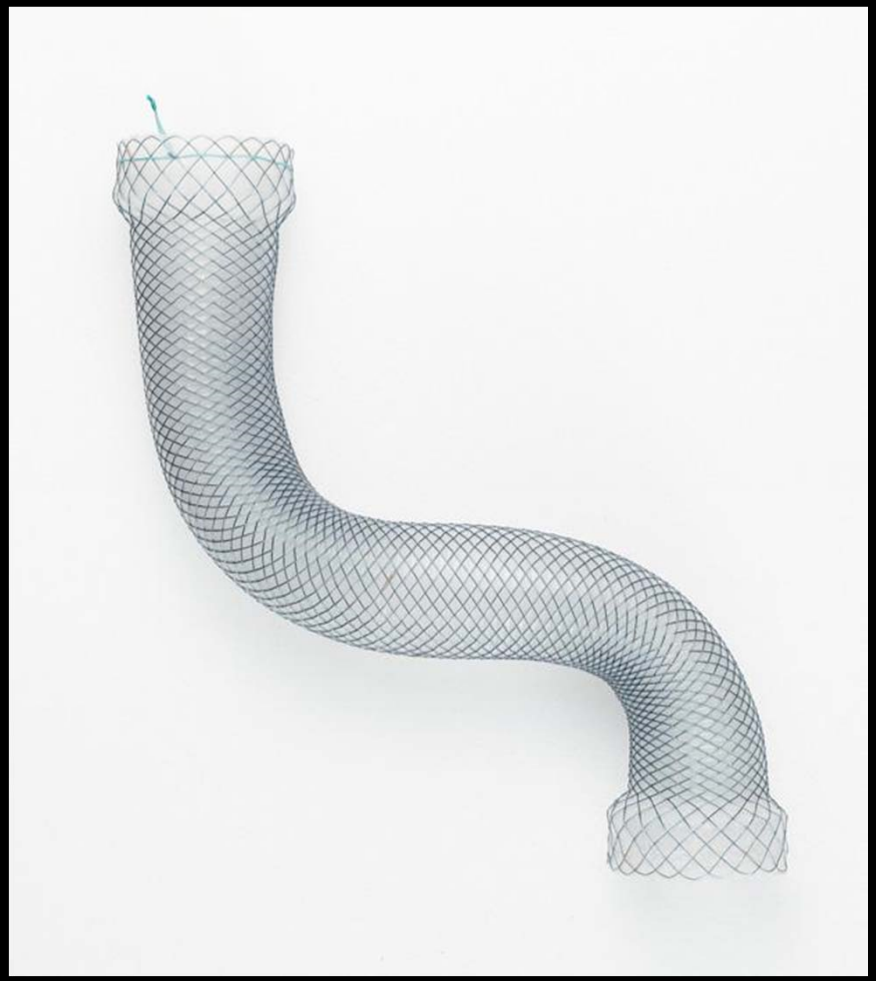
• The patient recovered over the next month, with resolution of the collections and was discharged after 2 months.

Postop Course

• The stent was removed at 3 months. EGD at the time of removal demonstrated complete healing of the gastro-esophageal anastomosis. The patient subsequently developed stricturing which has been managed with dilation. She is nonetheless able to eat semi-normally



Covered esophageal stent



Discussion

- Postoperative leaks complicate 1-3% of sleeve gastrectomies, the most common type of bariatric procedure today
  - Surgical treatment is required in 40-80% of cases
  - Surgical treatment is associated with high morbidity (up to 50%) and mortality (2%–10%)

Discussion

- Conservative management is successful approximately 90% of the time, however this is biased by the fact that only small leaks are managed conservatively (30% of all leaks)
- Removeable covered metallic stents are an accepted treatment strategy and are successful in approximately 90% of cases
- Stents but have a tendency to migrate about 15-20% of the time
- The choice of optimal stent is not yet defined

Key Takeaway

- Complete dehiscence/disconnection of a gastroesophageal anastomosis can managed with a covered stent when no other options are available

References

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