



Successful endoscopic closure of gastric pleural fistula from sleeve gastrectomy with OST clip and Stent

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Introduction

Gastro-pleural fistulae (GPF) formation are rare post bariatric surgery but it is nightmare life-threatening complications post-bariatric surgery. Few cases reported in the literature. We are reporting 2 cases of multimodality successfully management of GPF with endoscopy closure and stent placement.

Case 1 presentation

A 55-year-old male with hypertension, diabetes, chronic kidney disease, COPD, obstructive sleep apnea with BMI of 60 underwent robotic sleeve gastrectomy uneventfully, discharged home without complication POD 1. Two weeks followup in clinic he was doing well, lost 30 lbs , tolerated full liquid .

Post operative week 3, He readmitted to hospital for cough, fever, pneumonia, treated with IVabx and discharged home. He readmitted to hospital with the same symptoms and unable to tolerate per oral, no abd pain. Labs : WC15K,UpperGI, abd CTcan showed GPF (Picture 1-3): GPF from the upper potion of the sleeve and a kink at mid portion of the sleeve.

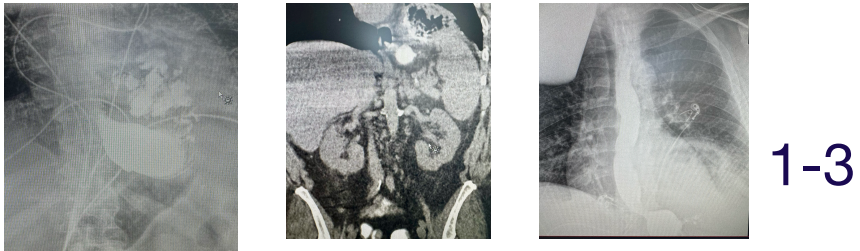
Managment:IVabx, Percutaneous drain and chest tube placed, TPN. Endoscopy with over the scope (OTSC) clips closure and metallic stent successfully. Symptoms resolved, fistula healed up after 6 weeks

Case 2 Presentation

A 26-y/o female presenting to ER with abdominal pain and shoulder pain treatment after sleeve gastrectomy revision. CT scan shows sub diaphragm abscess and pleural effusion. Patient was treated with IV abx percutaneous drainage, OTSC and endoscopy stent successfully.

Conclusion: Endoscopic OTSC and stent placement is likely the main drive , safe , effective and successful for the management of gastric pleural fistula post bariatric surgery.

Discussion

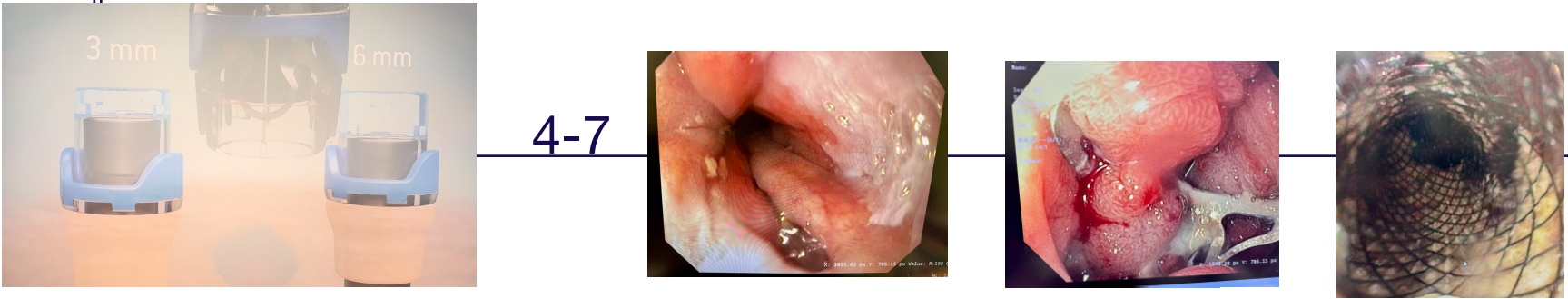


In these case study, after controled sepsis, drained abscess the consistentt GPF can be found with EGD. endoscopic management using over-the-scope clip (OTSC)placement with covered stent can successfully treat GPF.

Pathophysiology: GPF represents an internal gastrointestinal fistula characterized by an abnormal epithelialized connection between the stomach and the pleural cavity, most commonly arising from a persistent staple-line dehicence, ischemia leak or blow out from distal stricture at incisura after sleeve gastrectomy. Continued leakage promotes infection, abscess formation, and tissue breakdown, eventually leading to fistulization.

Clinically, patients often present with respiratory-dominant symptoms such as chronic cough, recurrent pulmonary infections, pleural effusion, sometimes accompanied by gastrointestinal manifestations including hematemesis or abdominal pain. Diagnosis is challenging and requires high clinical suspicion, with upper gastrointestinal contrast studies being the most reliable for visualizing the fistulous tract, supported by CT or MRI with oral contrast to localize abscesses and delineate anatomy.

Endoscopy allows direct identification of the defect and therapeutic intervention OTSC(pic 4) and stent success from literature review shows variable but promising closure rates for chronic gastrointestinal fistulas, particularly when luminal flow is diverted and intragastric pressure is reduced. These minimally invasive techniques interrupt the leak–infection–fistula cycle and allows tissue to heal and reduce the risk of open or combined thoraco-abdominal surgery.



In contrast, traditional surgeries seen from partial to total gastric resection, esophagojejunostomy, and Roux-en-Y reconstruction—sometimes combined with decortication pulmonary resections—have been associated with high complication rates and risk of recurrence.

Thus, endoscopic approaches may substantially lower short-term morbidity while achieving clinical resolution in selected patients. However, alternative explanations for successful closure include intervention during early stages, using OTSC gt type with deep elongated tip spike and twin graspers forceps to be able to close the full thickness of the fistula the tissue better (picture 4-7), relatively small fistula size, and effective control of infection and nutritional deficits. Endoscopic therapy may be inappropriate in cases of uncontrolled sepsis, extensive abscess cavities, wide fibrotic tracts, or ongoing high-output leaks where tissue cannot adequately support clip placement. The primary limitation of this case study, consistent with much of the current literature, limited sample size that depends on a more case-by-case evidence that restricts generalizability and prevents standardized success comparisons across techniques. Research studies should focus on larger, optimal patient selection, stepwise treatment methods, and comparative outcomes between conservative, endoscopic, and surgical strategies.

