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INTRODUCTION

- Endoscopic treatments have become vital in managing transmural gastrointestinal defects both as a first-line and rescue treatment.
- The latest advances in interventional endoscopy have made a paradigm shift in managing these defects from surgery to minimally invasive endoscopic procedures.
- We present a unique presentation of a perforation caused by foreign body ingestion (FBI), leading to a chronic duodenal fistula that was treated with a novel through the scope suturing device (X-Tack Endoscopic HeliX Tacking System).

CASE DESCRIPTION

- A 28-year-old male presented with a 4-week history of intermittent right upper quadrant abdominal pain associated with high-grade fevers.
- He had a past medical history and multiple episodes of FBI in the past. CT scan of the abdomen and pelvis revealed a large (14.2cm X 10.7cm) multiloculated liver abscess (Figure A).
- It also showed an impacted foreign body in the duodenum (Figure B) and multiple foreign bodies in the small intestine (Figure C).
- An EGD was performed, which revealed a spork in the second part of the duodenum (Figure D), which was removed using a snare (Figure E).

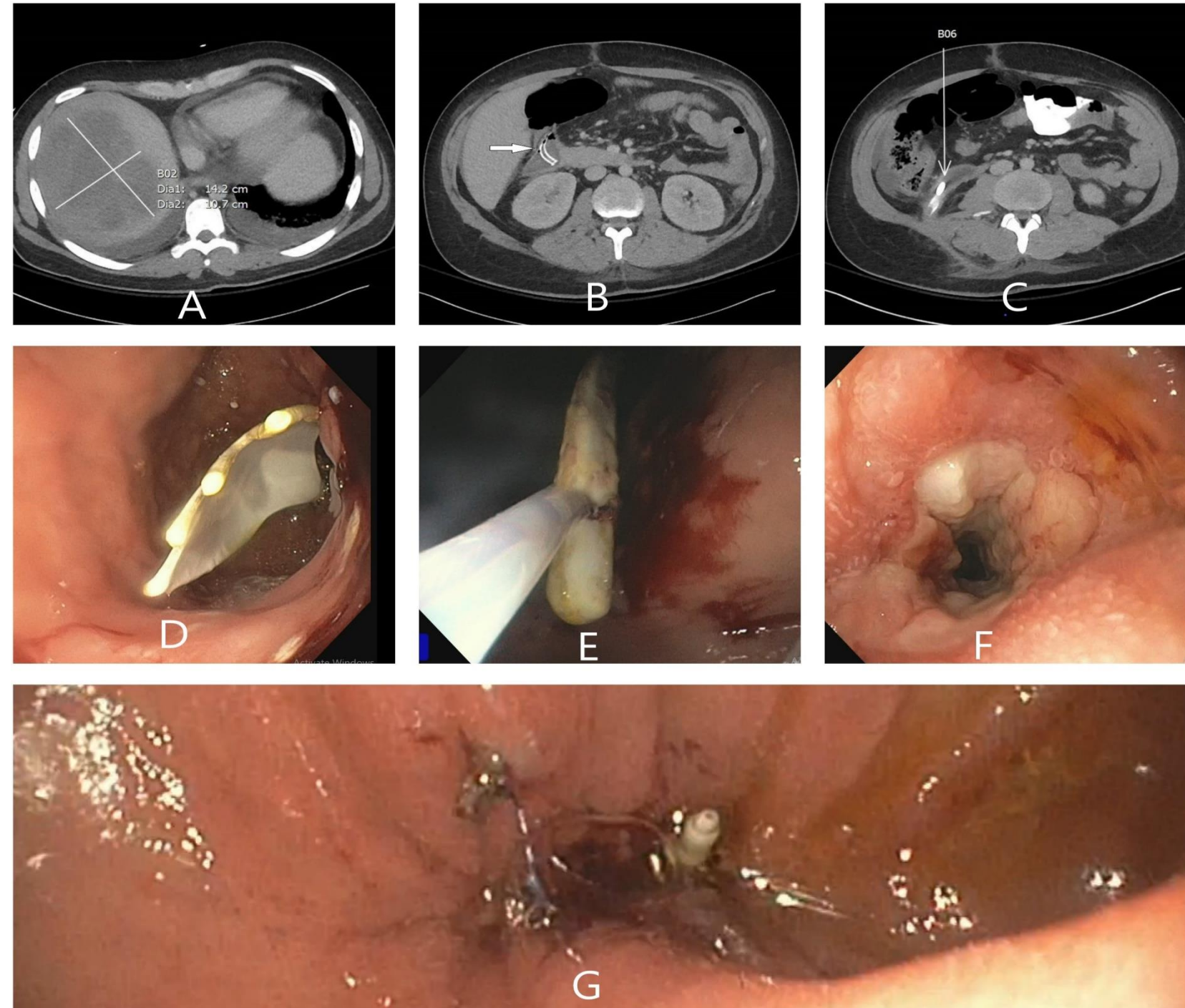


Image A: Liver Abscess in the Right Lobe of the Liver Image B: Curved Metallic Body in 2nd and 3rd part of Duodenum Image C: Small metallic bodies in the small intestine Image D: Metallic Spork In the duodenum Image E: Removal of Spork with a snare Image F: Chronic Fistulous Tract in Duodenum Image G: Endoscopic Closure of the Fistulous Tract

CASE DESCRIPTION

- A chronic-appearing fistulous tract was visualized at the duodenal sweep (Figure F).
- We decided to close the defect with a novel through-the-scope suturing device. Four HeliX Tacks were placed approximating the defect, and the suture was cinched with the endoscope cinching device.
- After deployment of the sutures, there appeared to be a residual opening; a second X-Tack with four HeliX Tacks was placed, but unfortunately, the suture broke.
- Finally, the third set of Helix Tack was placed, approximating the residual defect.
- After deployment, the fistulous tract appeared to be closed (Figure G). A follow-up CT scan with contrast revealed no residual duodenal leakage, and the patient improved clinically.

CONCLUSION

- Our case exhibits a rare presentation of chronic contained duodenal perforation successfully treated with the help of a through-the-scope suturing device.
- It allows a suture-based deep submucosal/intramucosal fixation through a standard scope.
- This technique is superior for the closure of large mucosal defects as compared to traditional TTS clips.
- In addition, this device has improved accuracy and simplicity without the need for endoscope withdrawal for device loading.
- It is less invasive than surgery and more appropriate for clinically stable patients.