



Choledochoscope with Stent Placement for Treatment of Non-Steroidal Anti-Inflammatory Drug-Induced Stricture in the Duodenum

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Background

- Malignancy is the most common cause of gastric outlet obstruction (GOO) but benign etiologies are responsible for a significant proportion of cases.
- Dilation therapy coupled with antisecretory therapy and removal of causal factors was shown to achieve long-term resolution of symptoms in patients with peptic ulcer-related GOO.
- The use of self-expandable metallic stents (SEMS) has been rarely reported in benign strictures.
- The following two cases highlight a novel approach to traversing duodenal strictures combined with use of SEMS in benign duodenal strictures..

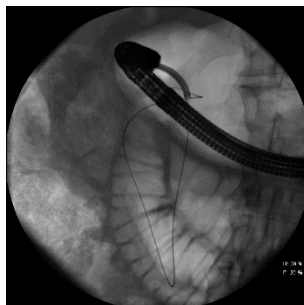
Case 1

- 65 year-old man with chronic NSAID use presented with post-prandial pain.
- Initial esophagogastroduodenoscopy (EGD) revealed a stricture in the distal bulb. Multiple attempts at passing the balloon and guidewire across the area were unsuccessful despite using fluoroscopic guidance.
- The repeat procedure was performed using a therapeutic gastroscope, allowing the passage of a choledochoscope with direct visualization of the lumen of the stricture.
- Then a guidewire was advanced through the choledochoscope, with subsequent stenting of the stricture using a SEMS, which was removed in 10 days.
- Serial dilation was performed.

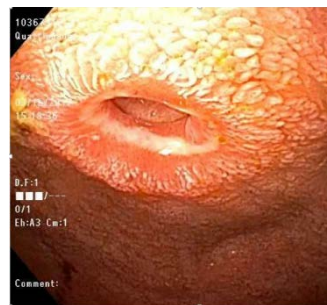
Case 2

- 77 year-old man with chronic NSAID use presented with nausea and vomiting.
- Initial EGD revealed two serial strictures around the C-sweep of the duodenum, which could not be traversed with a diagnostic gastroscope or ultrathin endoscope.
- A balloon dilation was attempted but given the short distance between the two strictures, the balloon was inadequately positioned.
- The repeat procedure was performed using a therapeutic gastroscope, allowing the passage of a choledochoscope with direct visualization of the lumen of the two strictures.
- A guidewire was advanced through the choledochoscope, followed by dilation and stent placement crossing both strictures, which was removed in 10 days.

Images

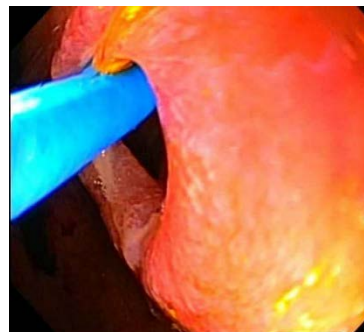


Case 1. Choledochoscope with passage of wire through stricture (fluoroscopy).



Case 2. Duodenal bulb.

Case 2. Duodenal bulb and choledochoscope passed through the therapeutic gastroscope.



Case 2. Stent placement.



Discussion

- We describe a novel approach for traversing duodenal stricture using a choledochoscope.
- Both cases initially could not be traversed using the conventional combined fluoroscopic and endoscopic methods.
- Direct visualization of the stricture with a passage of the choledochoscope aided in traversing the narrowed lumen and subsequent intervention using a SEMS for the treatment of the duodenal obstruction.
- The choledochoscope has the advantage of a smaller form factor, leading to easier passage of the scope through the stenosis with added benefit of direct visualization.
- This study is the first to report this unique technique, with other potential applications in both benign and malignant strictures in the upper gastrointestinal tract.

References

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