



Simultaneous Two Scope Method for Placement of Endoscopic Gastrojejunostomy With LAMS



Amirali Tavangar MD, David L. Cheung MD, Vamsi Vemireddy, MD, Peter H. Nguyen, MD, Jason Samarasena MD, MBA, AGAF, FACG
H. H. Chao Comprehensive Digestive Disease Center, University of California Irvine Medical Center

INTRODUCTION

- Lumen-Apposing Metal Stents (LAMS) have been a tremendous advancement in the field of Interventional Gastroenterology.
- They were Originally designed for pseudocyst/walled-off necrosis drainage.
- Nowadays, a number of novel indications have emerged for use of these stents.
- One of the most innovative uses is the creation of a gastro-enteric anastomosis for patients with gastric or duodenal outlet obstruction such as from cancer.
- This is a case of using two scopes side-by-side simultaneously to place the LAMS and create an endoscopic Gastro-jejunal (GJ) anastomosis.



Figure 1: EGD/EUS showing the guidewire penetrating through gastric wall to the jejunum

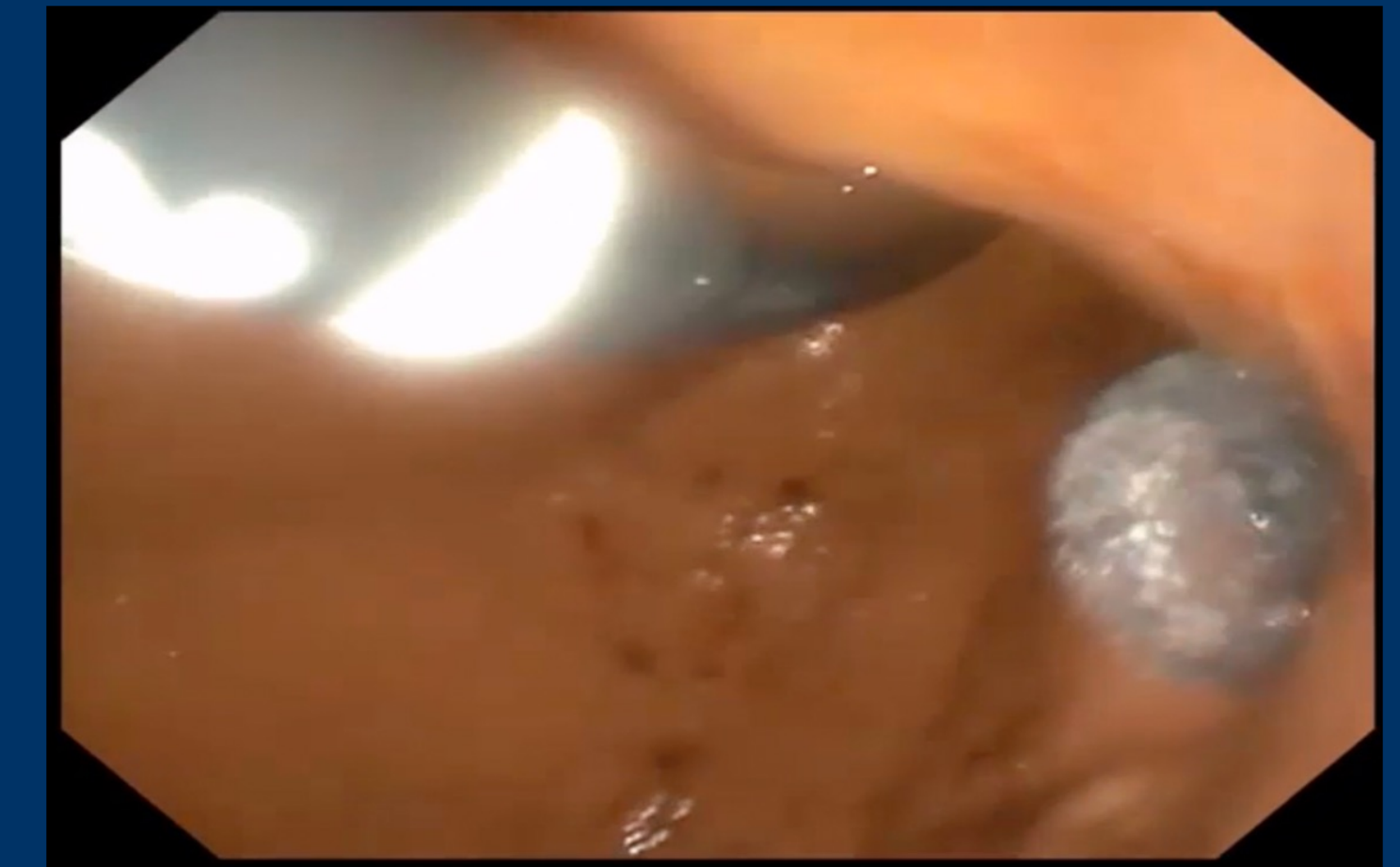


Figure 3: EUS endoview showing gastric side of the GJ and the 2nd scope

CASE DESCRIPTION

- This is a 51 y/o male who presented to the hospital with symptoms of nausea and vomiting over a week. CT showed a massively distended stomach. EGD revealed a mass at the pylorus and a tight stricture. EUS FNA confirmed adenocarcinoma. Decision was made to perform an Endoscopic GJ with LAMS. Initially, the Olympus XP-190N with a 5mm diameter was advanced through the mouth, into the stomach and past the obstruction. The scope was advanced into the 2nd portion of the duodenum. The umbilicus was disconnected from the processor but the scope was still attached to the foot activated water jet. We then put the EUS scope down alongside the "baby scope" and under EUS guidance we searched for a loop of bowel while simultaneously filling the lumen with water using the baby scope. EUS was able to identify a loop easily that was actively being filled with water and puncture was performed and LAMS was placed.

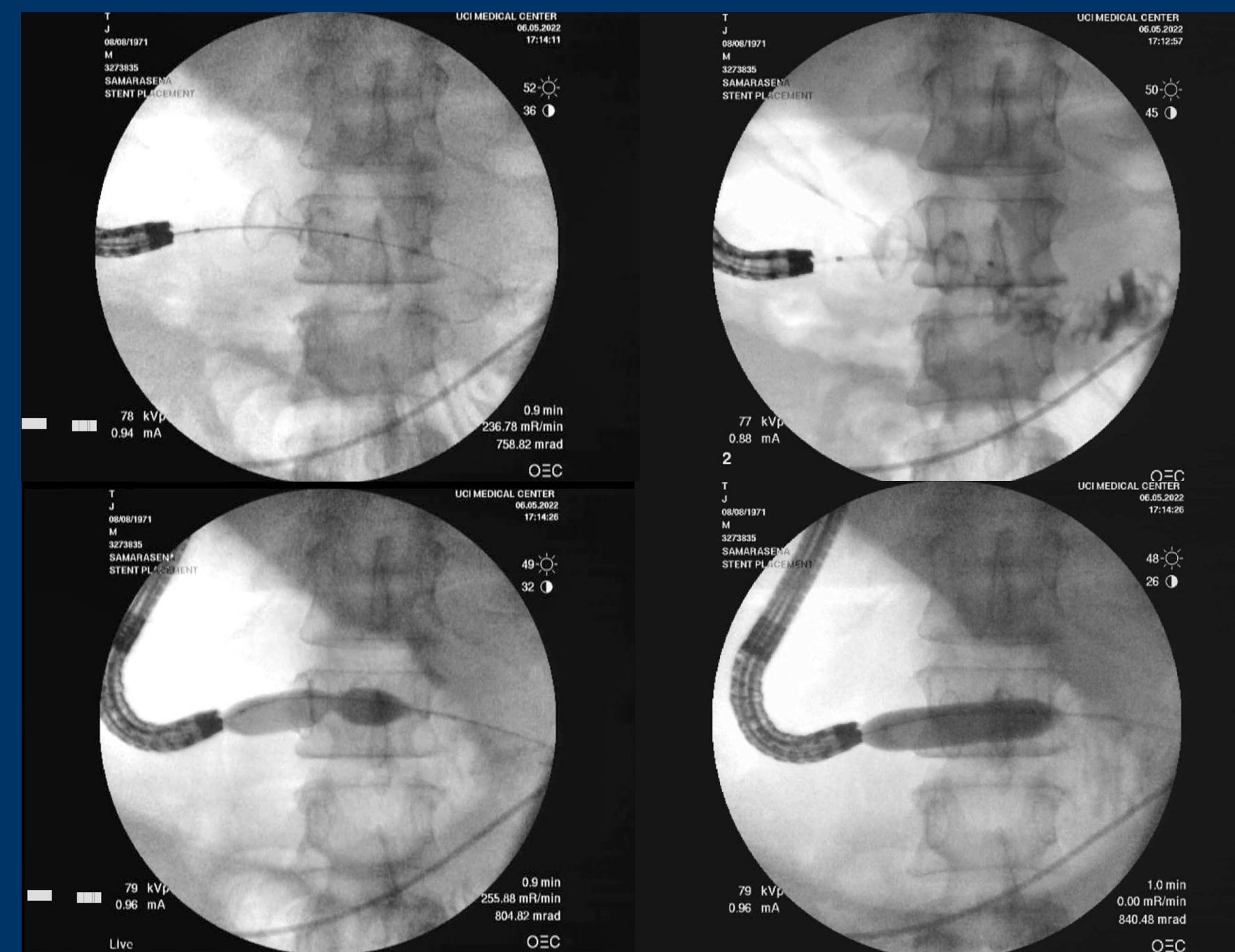


Figure 2: Fluoroscopy showing A) Passing wire through the stent B) Injecting contrast C) Inflation of a balloon D) Dilating the stent with more inflation of the balloon

DISCUSSION

- The placement of a LAMS to create a Gastro-jejunal anastomosis is a great advance in the field but must be performed with the utmost concern for safety.
- With the "two-scope" method described we are able to rapidly and continuously fill the intestinal lumen via the "baby scope" using foot activated water jet, thereby providing a large target for EUS-guided puncture of the bowel.
- Furthermore, passage of the scope past the stricture is often easier than passing a wire and then advancing a catheter such a naso-biliary drain over the wire and then removing the wire.
- Since we are using the baby scope as "the catheter" we are saving time on exchanges. This method has been used on 4 patients recently with 100% technical and clinical success.