

You Don't Have to Retrieve to Relieve: How and When to Trim a Self-Expanding Metal Biliary Stent

UCTN

Distal migration of biliary self-expanding metallic stents (SEMSs) has resulted in a number of notable complications, including stent-induced damage to the duodenal mucosa from contralateral duodenal wall impaction or trauma. This has led to ulceration, gastrointestinal bleeding, and duodenal perforation [1–3]. A SEMS is a relatively permanent device and its removal is technically challenging. We report here a case of impaction of a stent in the contralateral duodenal wall which was successfully managed by endoscopic laser trimming.

A 62-year-old woman initially presented with obstructive jaundice due to a malignant common bile duct stricture. This was treated by placement of a SEMS. The patient presented 1 year later with abdominal pain and jaundice. Endoscopic retrograde cholangiopancreatography showed stent impaction in the opposite duodenal wall. This had led to extensive ulceration and mild hemorrhage (Figure 1). The stent lumen was filled with biliary debris. Using a neodymium-yttrium-aluminum-garnet (Nd:YAG) laser (power 60, pulse 0.6 s), the metal stent was trimmed until approximately 1 cm of stent protruded from the ampullary orifice (Figure 2). The shortened stent was then successfully cannulated and cleared with balloon sweeping, and the patient's jaundice resolved.

It is our experience that a SEMS can be trimmed safely and effectively using the Nd:YAG laser. This technique was performed using standard equipment and was well tolerated by the patient. SEMS trimming may have a number of therapeutic applications. An obvious role is in the management of duodenal trauma or frank mucosal impaction. Another role might be to enable cannulation of stents that are difficult to reach. Shortening the stent to a more manageable length might allow easier access to the stent and facilitate endoscopic therapy.

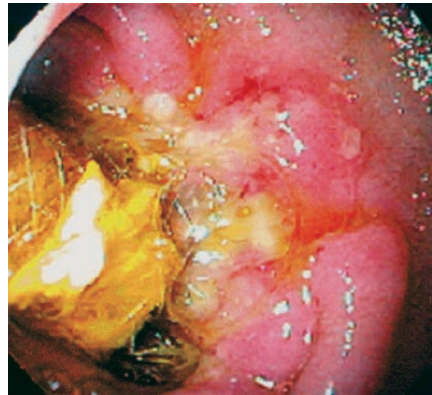


Figure 1 Endoscopic view of a self-expanding metallic stent (SEMS) impacted in the duodenal wall opposite to the papilla. The stent was occluded by biliary debris. Mucosal ulceration was seen.

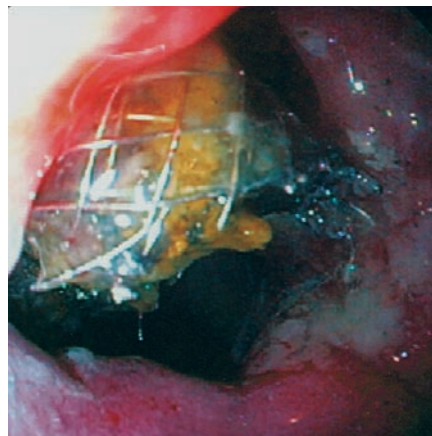


Figure 2 Laser trimming of the stent to an appropriate length relieved the impaction, thereby enabling cannulation.

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References

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