Clinical Use of the 20mm AXIOS™ Stent and Electrocautery Enhanced Delivery System to Drain Walled-off Pancreatic Necrosis

Boston Scientific
Advancing science for life™

Douglas G Adler MD, FACG, AGAF, FASGE

University of Utah School of Medicine, Huntsman Cancer Center, Salt Lake City, Utah, U.S.A.

technique spotlight

Patient History

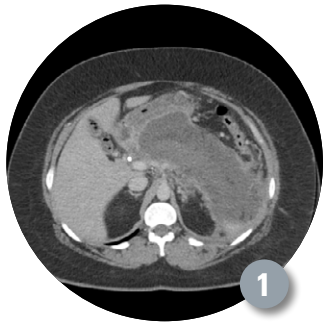
A 33-year-old man developed severe acute necrotizing pancreatitis of unclear etiology. The patient developed a large pancreatic fluid collection (PFC) largely replacing the body and tail of the gland. Biliary obstruction due to compression of the bile duct by the PFC was addressed by ERCP with plastic stent placement. Over 6 weeks, the patient's PFC was seen to mature with good apposition to the posterior wall of the stomach. The patient was referred for EUS and transluminal stent placement/cystgastrostomy.

Procedure

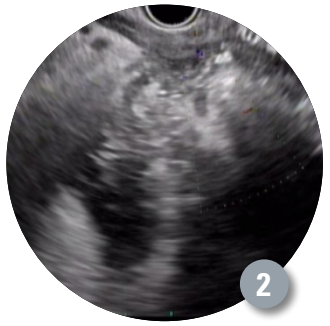
A 7.5MHz EUS with Doppler revealed a large PFC measuring 20cm (Figure 1). The lesion had a thick wall and contained copious solid and liquid debris (Figure 2), most consistent with walled-off pancreatic necrosis (WON). Using the AXIOS Stent, the PFC was accessed in a transgastric manner. A 20mm wide by 10mm long AXIOS lumen-apposing metal stent (LAMS) was deployed across the cystgastrostomy. (Figure 3) The AXIOS Stent was then dilated with an esophageal balloon to 15mm (Figure 4). Approximately 1L of purulent appearing, mixed solid and liquid PFC contents were seen to drain from the PFC to the stomach (Figure 5) and this was aspirated with the endoscope. The stent was left in situ (Figure 6).

Outcome

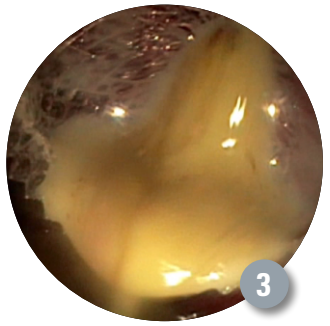
The patient tolerated the procedure well without difficulty and there were no adverse events. The patient was given a prescription for a course of oral antibiotics and discharged to home with instructions to follow up for endoscopic necrosectomy as an outpatient in one week.



CT image showing 20cm PFC/WON



7.5MHz EUS image of a large PFC adjacent to the stomach containing solid and liquid debris



Endoscopic image of 20mm AXIOS Stent immediately after deployment

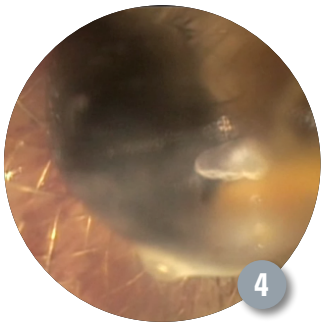
Clinical Use of the 20mm AXIOS™ Stent and Electrocautery Enhanced Delivery System to Drain Walled-off Pancreatic Necrosis

Boston Scientific
Advancing science for life™

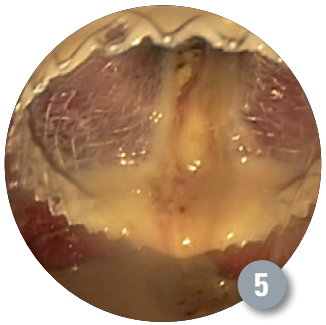
technique spotlight

Conclusion

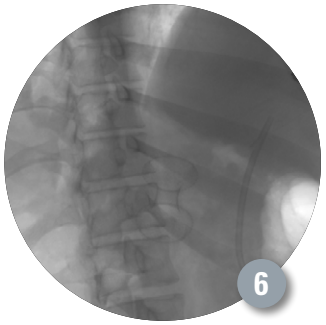
The 20mm AXIOS Stent size was ideal for this patient with a large PFC/WON as it allowed rapid drainage of solid and liquid contents and will greatly facilitate endoscopic necrosectomy going forward.



Endoscopic dilation of 20mm AXIOS Stent with a balloon



Endoscopic drainage of PFC contents through the 20mm AXIOS Stent



Flouroscopic image of 20mm AXIOS Stent after dilation. Note previously placed biliary stent as well

The AXIOS Stent and Delivery System and the AXIOS Electrocautery Enhanced Stent and Delivery System Indications for Use:

U.S.: The AXIOS Stent and Delivery System and the AXIOS Electrocautery Enhanced Stent and Delivery System is indicated for use to facilitate transgastric or transduodenal endoscopic drainage of symptomatic pancreatic pseudocysts > 6cm in size and walled-off necrosis >6cm in size with >70% fluid content that are adherent to the gastric or bowel wall. Once placed, the AXIOS Stent functions as an access port allowing passage of standard and therapeutic endoscopes to facilitate debridement, irrigation and cystoscopy. The stent is intended for implantation up to 60 days and should be removed upon confirmation of pseudocyst or walled-off necrosis resolution.

Europe: The HOT AXIOS Stent and Electrocautery Enhanced Delivery System & AXIOS Stent and Delivery System are indicated for use to facilitate transgastric or transduodenal endoscopic drainage of a pancreatic pseudocyst or a walled-off necrosis with ≥ 70% fluid content or the biliary tract.

IMPORTANT INFORMATION: These materials are intended to describe common clinical considerations and procedural steps for the use of referenced technologies but may not be appropriate for every patient or case. Decisions surrounding patient care depend on the physician's professional judgment in light of all available information for the case at hand.

Boston Scientific (BSC) does not promote or encourage the use of its devices outside their approved labeling. Case studies are not necessarily representative of clinical outcomes in all cases as individual results may vary.

Caution: the AXIOS stent should be removed upon confirmation of pseudocyst or WON resolution and is intended for implantation up to 60 days.

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

All images provided courtesy of Dr. Adler.

CAUTION: U.S. Federal law restricts this device to sale by or on the order of a physician.

CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings and instructions for use can be found in the product labelling supplied with each device. Information for use only in countries with applicable health authority registrations. Material not intended for use in France.

Boston Scientific Corporation
300 Boston Scientific Way
Marlborough, MA 01752-1234
www.bostonscientific.com/gastro
www.EndoSuite.com

ENDO-536306-AA March 2018