Treatment of a benign, anastomotic refractory rectal stricture with an AXIOS stent

A 49-year-old man with a history of type 2 diabetes mellitus, chronic renal failure, and sigmoid adenocarcinoma underwent a laparoscopic left hemicolectomy. A second surgery was necessary after unsuccessful endoscopic dilation of an anastomotic stricture located 12 cm from the anus.

After five further surgical procedures for different complications, a repeat anastomosis was necessary at 5 cm from the anus. However, a stricture developed at this anastomosis and could not be resolved by traditional endoscopic dilation. The patient was referred to CIDMA (Centro de Innovaciones Digestivas Martinez Alcala) for endoscopic treatment. During endoscopy, a severe, filiform, eccentric stenosis was observed at 5 cm from the anus. Successive dilations were performed using a through-the-scope, over-the-wire balloon under fluoroscopic guidance. Despite this aggressive protocol, the stenosis remained tight, with a diameter of < 10 mm. Therefore, placement of a novel, fully covered, self-expanding metal stent (SEMS) was proposed (AXIOS AXS15-10; Xlumena Inc., Mountain View, California, USA) (Video 1). The stent was placed under endoscopic and radiologic guidance (Fig. 1, Fig. 2). The prosthesis was well tolerated without complications or the need for analgesia (Fig. 3), and was removed 40 days later (Fig. 4, Video 1). The patient remained asymptomatic and with adequate intestinal transit after 2 months’ follow-up.

SEMS are not widely used for benign colon disease [1]. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.

The patient presented in this report had a complex, severe, and refractory anastomotic stenosis, located very close to the anus, and therefore was not a candidate for treatment with currently available prostheses. The AXIOS echo-endoscopic stent, which was designed for treatment of pancreatic pseudocysts, is a completely covered SEMS with proximal and distal abdominal pain, migration or late prosthesis obstruction. Biodegradable stents are an alternative and their placement is an effective treatment in anastomotic strictures of the colon, as they are more flexible than metal or plastic stents and do not require removal because they disintegrate after 11–12 weeks [2]. However, these stents are wider, longer, and thus poorly tolerated, especially in locations close to the anus.
flanges and a smaller central section, which measures 1.0 or 1.5 cm in diameter. This stent is shorter than other stents and, as demonstrated in the current case, may also be used to treat benign, complex, anastomotic rectal strictures.

Endoscopy_UCTN_Code_TTT_1AQ_2AF

Competing interests: None

Felipe Martínez Alcalá¹, Felipe R. Martínez-Alcalá García¹, Andres Sánchez-Yague², Alvaro Martínez-Alcalá García¹, Jose Antonio Ciria Avila¹, Jose Manuel Perez Pozo¹

¹ CIDMA (Centro de Innovaciones Digestivas Martínez Alcalá), Sevilla, Spain
² Hospital de Costa del Sol, Marbella, Málaga, Spain

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1392676
Endoscopy 2015; 47: E413–E414
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Alvaro Martinez-Alcalá García, MD
Calle San Vicente 36
Cp: 41002 Sevilla
Spain
Fax: +34-66-2372216
alvaromalcala@gmail.com