Endoscopic stricturotomy followed by Axios stent placement for management of tight ileorectal anastomotic stricture

HEALTH+ HOSPITALS Elmhurst

Haidar Khan MD, Jonathan Vincent M. Reyes, MD, MHA, Vennis Lourdusamy, MD, Ahmad Al-Khazraji MD, Anastasia Novikov MD, Aaron Walfish MD, Joshua Aron MD, Joel Baum MD, Raghav Bansal MD, Krishna Gurram MD Icahn School of Medicine at Mount Sinai - Elmhurst Hospital Center

Abstract

Although endoscopic balloon dilation has been the mainstay management of benign colorectal anastomotic strictures, novel techniques such as endoscopic stricturotomy or stricturoplasty (defined as stricturotomy with clip placement) have been increasingly employed by advanced endoscopists based on their expertise. We describe a novel technique of stricturotomy followed by AXIOS stent placement in the same setting for a tight short segment ileorectal anastomotic stricture in a patient with MUTYH associated polyposis (MAP)

Case Presentation

A 61 yo M with MAP managed with subtotal colectomy and ileorectal anastomosis was found to have asymptomatic anastomotic stricture noted on surveillance colonoscopy which was unable to be traversed with a pediatric colonoscope. Balloon dilation to 15 mm was performed. A year later the patient presented with vomiting and abdominal distension and with imaging evidence of distended small bowel. Colonoscopy showed a tight anastomotic stricture (1 cm in length and 3 mm in diameter). Endoscopic stricturotomy was performed in a circumferential fashion using an IT nano 2 knife with electrocautery, followed by the placement of an AXIOS stent (10 mm x 20 mm). There were no major complications. At one month follow up, the patient had complete resolution of his symptoms. Stent was removed at two month follow up.



Figure 1. lleorectal anastomotic stricture



Figure 3. Close up view of AXOIS stent



Haidar Khan Icahn School of Medicine – Elmhurst Hospital Center Email: khanh9@nychhc.org



Figure 2. Stricturotomy with IT nano 2 knife.



Figure 4. Ileorectal anastomosis status post AXIOS stent removal at 2 month follow up



Discussion

Endoscopic balloon dilation is the most common form of management of benign colorectal strictures with restenosis observed in about 11% of cases. Novel advanced endoscopic techniques such as stricturotomy/stricturoplasty have been performed predominantly for IBD related anastomotic strictures with comparable efficacy to surgical resection. The combination of stricturotomy followed by stent placement in the same setting is novel, and can be considered to maintain lumen patency for tight strictures to achieve durable response. Major complications during stricturotomy include bleeding that ranges from 3-14%. This complication can easily be treated using soft coagulation setting with the endoknife, coagulation grasper forceps, and other simple tamponade techniques. Risk of perforation is very rare. In summary, we describe a novel endoscopic technique for the treatment of benign colorectal anastomotic strictures which may result in more durable patency. Further studies are needed to assess long term outcomes.