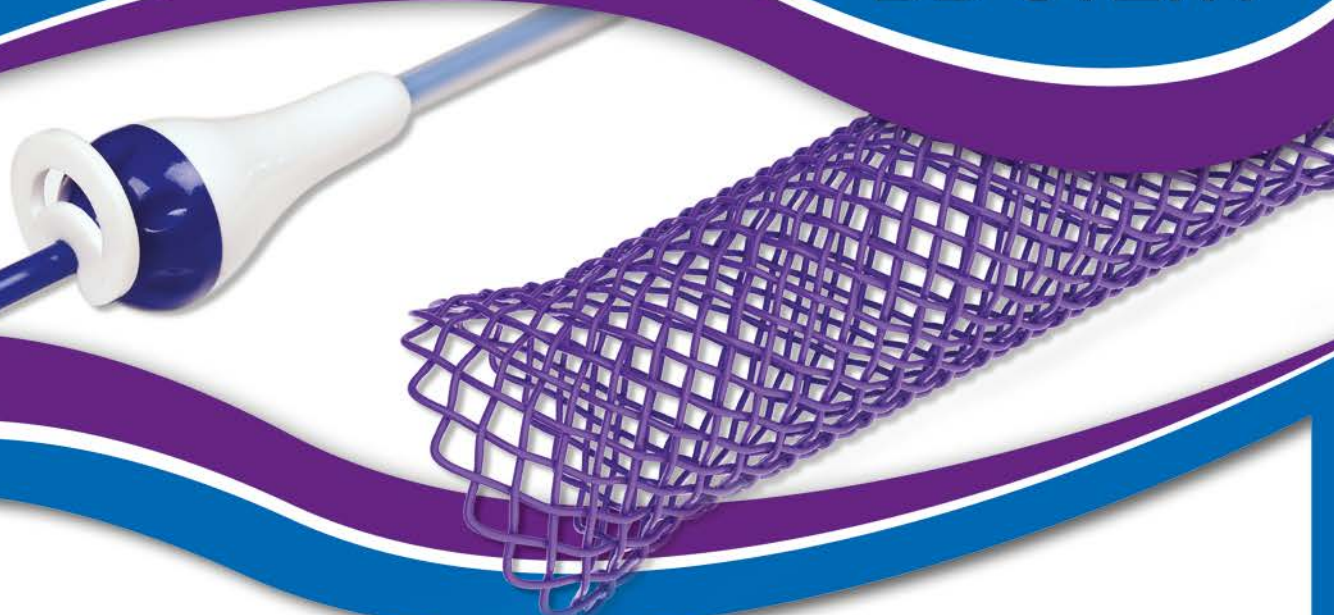


SX-ELLA Stent Esophageal Degradable BD BD STENT



Canena JM, Liberato MJ, Rio-Tinto RA, Pinto-Marques PM, Romão CM, Coutinho AV, Neves BA, Santos-Silva MF. **A comparison of the temporary placement of 3 different self-expanding stents for the treatment of refractory benign esophageal strictures: a prospective multicentre study.** BMC Gastroenterol. 2012 Jun 12;12:70.

...The safety of the procedure in association with reasonable clinical success in a group of patients that is very difficult to manage makes temporary stent placement an appealing option ... the temporary placements of biodegradable stents were associated with clinical success in 1/3 of our patients...

Griffiths EA, Gregory CJ, Pursnani KG, Ward JB, Stockwell RC. **The use of biodegradable (SX-ELLA) oesophageal stents to treat dysphagia due to benign and malignant oesophageal disease.** Surg Endosc. 2012 Aug;26(8):2367-75.

...25 attempts at placing SX-ELLA biodegradable oesophageal stents were made ... BD SX-ELLA oesophageal stents work well for the duration of their life span and result in significant improvements in dysphagia scores...

Hirdes MM, Siersema PD, van Boeckel PG, Vleggaar FP. **Single and sequential biodegradable stent placement for refractory benign esophageal strictures: a prospective follow-up study.** Endoscopy. 2012 Jul;44(7):649-54.

...59 stents were placed in 28 patients. Patients had previously been treated with multiple dilations (n=20) or multiple dilations and non-biodegradable esophageal stenting (n=8) ... Sequential stenting may be an option to avoid serial dilations...

van Boeckel PG, Vleggaar FP, Siersema PD. **A comparison of temporary self-expanding plastic and biodegradable stents for refractory benign esophageal strictures.** Clin Gastroenterol Hepatol. 2011 Aug;9(8):653-9.

...Placement of self expandable plastic stents (SEPSs) or biodegradable stents provides long-term relief of dysphagia in 30% and 33%, respectively, of patients with refractory benign esophageal stricture. Biodegradable stents require fewer procedures than SEPSs...

van Hooft JE, van Berge Henegouwen MI, Rauws EA, Bergman JJ, Busch OR, Fockens P. **Endoscopic treatment of benign anastomotic esophagogastric strictures with a biodegradable stent.** Gastrointest Endosc. 2011 May;73(5):1043-7.

...Conventional techniques are typically executed on an interval basis requiring multiple endoscopic procedures, the biodegradable stent causes a gradual dilation during several weeks ... SX-ELLA biodegradable esophageal stent in patients with dysphagia caused by benign anastomotic esophageal strictures has promise in regard to efficacy and safety...

Repici A, Vleggaar FP, Hassan C, van Boeckel PG, Romeo F, Pagano N, Malesci A, Siersema PD. **Efficacy and safety of biodegradable stents for refractory benign esophageal strictures: the BEST (Biodegradable Esophageal Stent) study.** Gastrointest Endosc. 2010 Nov;72(5):927-34

...21 patients were enrolled in the study ... the biodegradable stent showed a favourable risk / benefit ratio, achieving complete relief of dysphagia in nearly 50% of RBES patients without the occurrence of major complications. The use of this stent may be a valuable alternative to repeat endoscopic dilation...

Gastroenterological Endoscopy

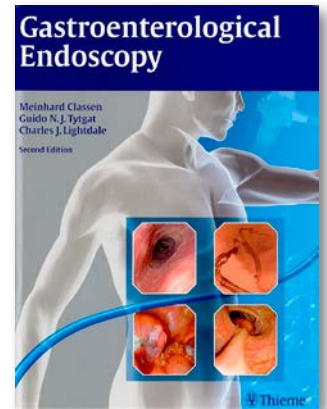
Second Edition, Thieme, 2010

Meinhard Classen, Guido N. J. Tytgat, Charles J. Lightdale

On the page 396 you can find the description of degradable stents.

“Biodegradable stents have the potential to allow treatment of benign disease without the need for additional procedures to remove them. One such stent is the SX-ELLA (ELLA-CS, Hradec Králové, Czech Republic), designed for the treatment of benign strictures and of achalasia refractory to other therapies.”

This article does not mention clinical efficiency and safety of the BD stent. However there are already numerous publications giving this evidence.



Practical Pediatric Gastrointestinal Endoscopy

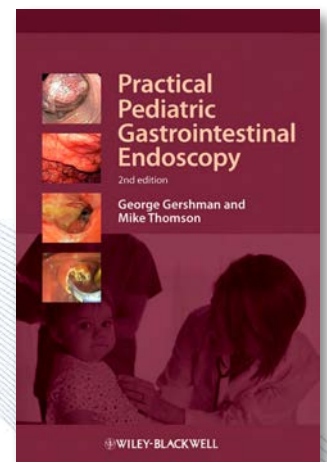
Second edition, John Wiley & Sons, 2011

George Gershman, Mike Thomson

Pages 159-162 show general information about biodegradable stents. Later in the text a successful pediatric case is described.

“A 10 year-old healthy boy with normal psychomotor development ingested several full swallows of a drain cleaner by accident... A control endoscopy after 2 weeks showed a developing stenosis at the mid-esophagus about 2cm long... About 12 weeks after insertion, the stent had degraded about 50%. At that time, the esophageal mucosa had healed... Gastric pull-up or colonic interposition was avoided. The child now has normal eating habits.”

The pediatric biodegradable stent is a subject of ongoing research and further development.



Self-Expandable Stents in the Gastrointestinal Tract

Springer, 2013

Richard Kozarek, Todd Baron, Ho-Young Song

On the pages 61 and 62 there are characteristics of different types of self-expanding plastic stents. BD Stent is mentioned as the only commercially available biodegradable stent. More detailed description is on the pages 83 and 84.

“In 2008, a biodegradable (BD) SX-ELLA stent was introduced. The stent is manufactured from woven polydioxanone monofilament, which degrades by random hydrolysis accelerated by a low ambient pH. Stent integrity and radial force are maintained for 6-8 weeks following deployment and its disintegration usually occurs by 11-12 weeks post deployment. The degradation products are not harmful; the stent material is partly absorbed and partly travels through the gastrointestinal tract...”

