

Modified Self-Expanding Plastic Stent for the Treatment of Refractory Benign Esophageal Strictures

UCTN

Self-expanding plastic stents (SEPSs) are increasingly used for the treatment of benign gastrointestinal strictures, because they may be extracted with substantially less tissue damage compared with self-expanding metal stents. However, the problem of a high rate of premature dislocation is still unsolved, especially in strictures where there is also extended prestenotic or poststenotic dilatation, or both. Acutely waisted SEPS, which are so far not available, are required to stent these strictures.

To obtain such a stents we combine a colorectal SEPS (Polyflex, diameter 34/30/34mm, length 100 mm; Rüschi, Kern, Germany) with part of an esophageal SEPS (Polyflex, diameter 16/20 mm; Rüschi). The latter is shortened according to the length of the stricture and is then slipped over the colorectal stent like a napkin ring (Figure 1). The two parts are fixed together with a single nonresorbable suture. This combined colorectal-esophageal stent can be inserted using the original introducing system for the colorectal SEPS.

Figure 2 shows the application of the stent described above, in a 12-year-old girl with a megaesophagus caused by a 3-cm stricture of the esophagocardial junction. This stricture was the result of a failed antireflux surgical procedure, and treatment with bougienage and balloon dilation had been unsuccessful. All the available esophageal Polyflex stents, up to the largest diameter (21/25 mm), had migrated within a few days. In contrast, our modified Polyflex stent stayed in the correct place for 4 weeks.

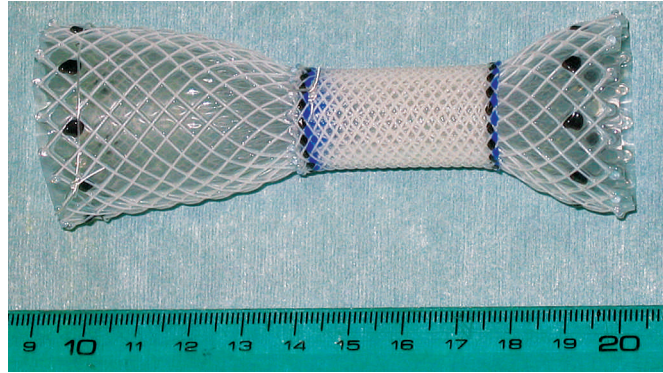


Figure 1 Construction of the modified self-expanding plastic stent (SEPS).

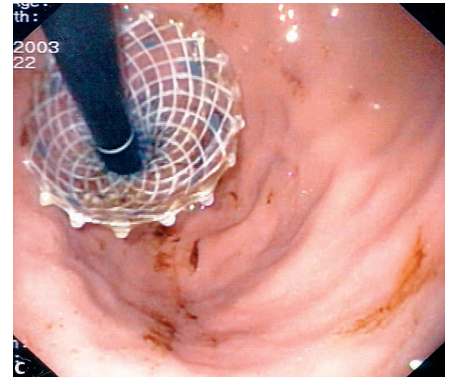
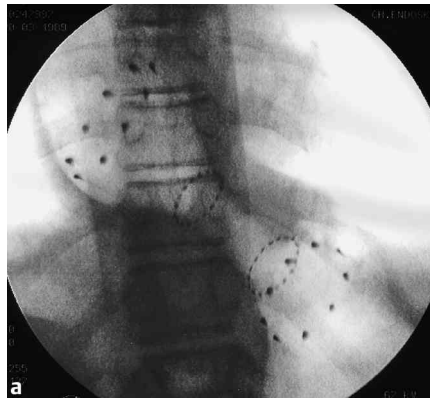
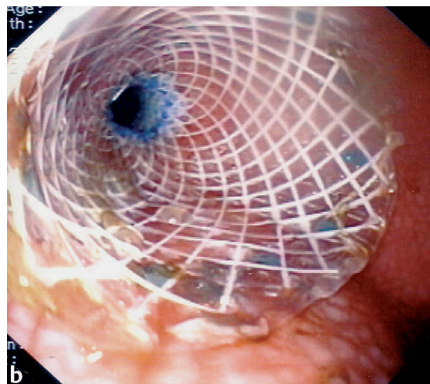


Figure 2 A well-positioned SEPS at the esophagocardial junction: **a** radiographic view; **b** prograde endoscopic view; **c** retrograde endoscopic view.



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