Lasso Technique for Retrieval of a Dislocated and Impacted Esophageal Stent



With the advent of self-expanding metal stents, esophageal stent insertion has become a relatively simple method of relieving dysphagia due to esophageal cancer. However, stent migration is a well-recognized complication. If dislocation occurs, endoscopic retrieval using a forceps and/or polypectomy snare is usually possible [1]. To use these techniques, at least one end of the stent has to be accessible to the snare.

In the case of distally migrated biliary endoprostheses with impaction into the duodenal wall, a method known as the "lasso technique" has been shown to be a successful way of removing the endoprostheses [2–4]. This technique has also been used to remove a migrated colonic stent [5].

In a 51-year-old woman with advanced distal esophageal carcinoma, a self-expanding metal stent was inserted endoscopically to relieve dysphagia. However, 1 day after implantation, the stent was found to have dislocated into the stomach. Both ends of the stent had become

impacted in the gastric wall, so that stent extraction with a snare or balloon was not possible (Figure 1). Using the lasso technique, a standard guide wire and a snare were advanced through each of the working channels of a double-lumen gastroscope (Pentax EG-3840TK). The guide wire was advanced until it passed above the middle portion of the stent and was grasped by the snare, which was advanced below. After closure of the snare, the distal part of the guide wire was extracted through the endoscope's working channel. With traction being applied to both ends of the guide wire, the esophageal stent was drawn up to the tip of the endoscope (Figure 2) and removed by extracting the endoscope. By both collapsing and bending the stent at its midpoint, the sharp barbs at the end of the stent were directed away from the gastric and esophageal mucosa, thus minimizing injury during stent extraction. A second self-expanding metal stent was inserted in the same session, without any complications.

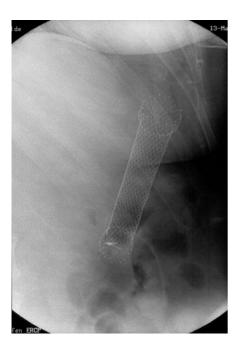


Figure 1 The distally migrated esophageal metal stent.

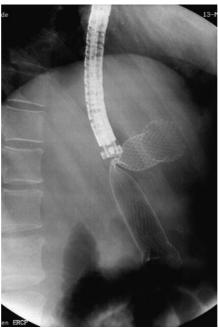


Figure **2** Extraction of the stent using the lasso technique.

The lasso technique is thus a simple and safe method of extracting esophageal metal stents in the rare cases in which stent dislocation into the stomach occurs, with impaction of both ends of the stent into the gastric wall.

U. Weickert, R. Jakobs, E. Siegel, D. Schilling, J. F. Riemann

Dept. of Medicine C (Gastroenterology, Hepatology and Diabetology), Ludwigshafen City Hospital (University of Mainz), Ludwigshafen, Germany.

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Corresponding Author

R. Jakobs, M.D.

Medizinische Klinik C Klinikum der Stadt Ludwigshafen Bremserstraße 79 67063 Ludwigshafen Germany

Fax: +49-621-5034112 E-mail: jakobsr@klilu.de