VACStent: a new option for endoscopic vacuum therapy in patients with esophageal anastomotic leaks after upper gastrointestinal surgery

Esophageal anastomotic leaks remain a life-threatening postoperative complication of upper gastrointestinal surgery. In Germany, self-expandable metal stents (SEMS) and endoscopic vacuum therapy (EVT) are established endoscopic treatment options [1, 2], but no evidence points to the superiority of either of these [3]. Consequently, new approaches aim to combine both procedures [4, 5]. One available medical device that combines EVT (sealing and drainage) with SEMS treatment (sealing and food passage) is a fully covered SEMS coated with a polyurethane foam (VACStent; Möller Medical GmbH, Fulda, Germany) (▶Fig.1). To our knowledge, this is the first report on using a hybrid SEMS for treating an esophageal anastomotic leak (▶Video 1).

A 61-year-old man with an esophageal anastomotic leak (▶Fig.2) had undergone previous total gastrectomy for a signet cell carcinoma of the stomach. On the 16th postoperative day (POD), the patient was admitted to our hospital in a septic condition, having been treated unsuccessfully with an over-the-scope clip (Ovesco Endoscopy AG, Tübingen, Germany). We performed an endoscopy (POD 16) and discovered a semicircular anastomotic leak of the esophagojejunal anastomosis with an abscess cavity. We removed the clip and applied a VACStent (125 mmHg negative pressure) to treat the leak. A computed tomography scan with oral contrast (▶Fig.3) confirmed sealing of the leak so that oral intake of fluids was possible. The following endoscopy (POD 18) demonstrated a healing tendency; consequently, we placed a second VACStent. After VACStent removal (POD 22), we observed a sealed leak with a small and encapsulated wound cavity (▶Fig.4). A digestive swallowing test confirmed the sealing. Although the postoperative course was delayed because of pulmonary complications, the patient was discharged (POD 39) (▶Fig.5) with full oral intake and no clinical signs of a residual anastomotic leak.

Endoscopy_UCTN_Code_TTT_1AO_2AI

Competing interests

None
The authors

Seung-Hun Chon1, 2, Isabel Bartella1, Martin Bürger2, Isabel Rieck2, Tobias Goeser2, Wolfgang Schröder1, Christiane Josephine Bruns1

1 Department of General, Visceral, Cancer and Transplant Surgery, University of Cologne, Cologne, Germany
2 Department of Gastroenterology and Hepatology, University Hospital of Cologne, Cologne, Germany

Corresponding author

Seung-Hun Chon, MD
Department of General, Visceral, Cancer and Transplant Surgery, University Hospital of Cologne, Kerpener Str. 62, 50937 Cologne, Germany
Fax: +49-221-478 86227
seung-hun.chon@uk-koeln.de

References


Bibliography

DOI https://doi.org/10.1055/a-1047-0244
Published online: 2.12.2019
Endoscopy 2020; 52: E166–E167
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos