Endoscopic management of postesophagectomy leak with modified clip-and-loop technique

A 75-year-old woman with carcinoma of the lower esophagus underwent esophagectomy with proximal gastrectomy. On the 6th day after surgery, she developed breathlessness with chest pain and high-grade fever. Computed tomography (CT) of the chest showed a leak from the anastomotic site tracking into the right pleura (▶ Fig. 1). Upper gastrointestinal endoscopy showed dehiscence of approximately 1 cm at the anastomotic site (▶ Fig. 2). After multidisciplinary discussion, endoscopic rent closure was planned. The edges of the defect were ablated using argon plasma coagulation. Due to angulation, complete apposition of the defect using clips was not feasible. Resolution clips (Boston Scientific, Marlborough, Massachusetts, USA) were applied to the edges of the defect. An endoloop (Olympus Medical, Tokyo, Japan) was applied to tie the clips together to close the defect completely (▶ Video 1) (▶ Fig. 3). There was a decrease in the right pleural drain output, with contrast swallow showing no leak on day 5 (▶ Fig. 4). Repeat endoscopy on day 14 showed a completely healed defect at the anastomotic site (▶ Fig. 5).

The “loop clip” technique for closure of defects after endoscopic submucosal dissection was initially described by Sakamoto et al. in 2008, where a loop is attached to the edges of a defect with

---

Sundaram Sridhar et al. Endoscopic management of ... Endoscopy | © 2021. Thieme. All rights reserved.
clips and subsequently tightened to close the defect [1, 2]. Other techniques that have been described for gastrotomy closure are the King technique and Queen technique [3, 4], in which a double-channel endoscope or multiple loops are required. The modified clip-and-loop technique we used has been described by Luigiano et al. for closure of tracheoesophageal fistula [5]. In our patient the size of the defect was small, making it difficult to attach a loop to the edges of the defect. Complete closure using clips was difficult due to the angulation and free lower edge. Hence the clips were tied together to ensure approximation and complete closure of the defect.

Endoscopy_UCTN_Code_TTT_1AO_2AI

Competing interests

The authors declare that they have no conflict of interest.

The authors

Sridhar Sundaram1, Raoasheb Rathod1, Utkarsh Chhanchure1, Prachi Patil1, Kiran Mane1, Devayani Niyogi2, Shaesta Mehta1

1 Department of Digestive Diseases and Clinical Nutrition, Tata Memorial Hospital, Homi Bhabha National Institute, Dr. E Borges Road, Parel, Mumbai 400012, India
drsridharsundaram@gmail.com

References


Corresponding author

Sridhar Sundaram, MD, DM
Department of Digestive Diseases and Clinical Nutrition, Tata Memorial Hospital, Homi Bhabha National Institute, Dr. E Borges Road, Parel, Mumbai 400012, India
drsridharsundaram@gmail.com

Bibliography

Endoscopy
DOI 10.1055/a-1638-8657
ISSN 0013-726X
published online 2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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

Sundaram Sridhar et al. Endoscopic management of... Endoscopy | © 2021. Thieme. All rights reserved.