Lesions in the esophageal diverticulum are at risk of perforation during endoscopic resection due to a lack of or thinned muscularis propria [1]. We successfully performed endoscopic submucosal dissection (ESD) for superficial esophageal cancer in a Rokitansky diverticulum. We detected superficial esophageal cancer in a depressed area in the middle thoracic esophagus of a 60-year-old woman (▶Fig. 1). Submucosal injection was performed, but the submucosal elevation was inadequate, especially in the center of the lesion (▶Fig. 2). We realized that the lesion was located in a diverticulum. Endoscopic ultrasonography (EUS) did not reveal absence of the fourth layer, which represented the muscularis propria (▶Fig. 3), suggesting that this was a Rokitansky diverticulum. Considering the risk of perforation, we performed ESD in the operating room. After circumferential incision, we anchored a dental floss clip (DFC) to the oral edge of the lesion. DFC traction made it easier to identify the layer to be dissected. We dissected the submucosal layer as shallowly as possible using a scissor-type knife (▶Fig. 4). En bloc resection was achieved, and there was no muscular defect (▶Fig. 5), confirming that this was a Rokitansky diverticulum. The following day, esophagogastroduodenoscopy revealed no contrast leakage. Histopathological examination revealed squamous cell carcinoma within the epithelium without lymphovascular invasion, suggesting a low risk of recurrence without additional treatment [2] (▶Video 1).

In this case, we confirmed no obvious lack of the muscularis propria using EUS; therefore, we decided to perform ESD. Even if EUS does not show any area lacking muscularis propria, the dissection of the submucosal layer should be shallow given the possibility that such an area could exist [1]. The use of DFC traction in esophageal ESD has been reported to reduce the risk of perforation [3], and a scissor-type knife is useful in diverticulum cases [4]. We combined these two techniques to achieve shallow dissection of the submucosal layer and successfully completed ESD.
Competing interests

The authors declare that they have no conflict of interest.

The authors

Kosuke Tanaka¹, Yohei Yabuuchi¹, Daisuke Yamashita², Kazuya Hosotani¹, Shuko Morita¹, Tetsuro Inokuma¹
1 Department of Gastroenterology, Kobe City Medical Center General Hospital, Kobe, Japan
2 Department of Pathology, Kobe City Medical Center General Hospital, Kobe, Japan

Corresponding author

Yohei Yabuuchi, MD
Department of Gastroenterology, Kobe City Medical Center General Hospital, 2-1-1 Minatojimaminamimachi Chuo-ku, Kobe, Hyogo 650-0047, Japan
buchidess@gmail.com

References


Endoscopy
DOI 10.1055/a-1884-9509
ISSN 0013-726X
published online 2022
© 2022. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/licenses/by-nc-nd/4.0/)
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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

Endoscopy E-Videos is an open 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. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.
This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Video 1 Endoscopic submucosal dissection for a superficial esophageal squamous cell carcinoma located in a Rokitansky diverticulum.