Endoscopic treatment of intramural fistula and mucosal tear after peroral endoscopic myotomy

Peroral endoscopic myotomy (POEM) is a safe procedure, with few reported adverse events [1–3]. The integrity of the mucosal flap at the end of the procedure is crucial to prevent leakages and infections. We report on a rare complication after POEM.

A 72-year-old woman with type III achalasia and very severe dysphagia underwent POEM. The perioperative course was uneventful, but 2 weeks later, she presented with chest pain and dysphagia for solids.

An esophagogastroduodenoscopy showed complete dehiscence of the mucosotomy (Fig. 1). Multiple openings on the mucosal flap were present, placing the real esophageal lumen in communication with a large “false lumen” of the submucosal tunnel created during POEM (Fig. 2). The esophageal wall, where the myotomy had been performed, was fibrotic but intact. Computed tomography (CT) did not reveal any leakage or periesophageal collection (Fig. 3).

In order to avoid food becoming lodged within the false lumen, the mucosal flap along the tunnel was cut, leaving the fibrotic esophageal wall behind the mucosa completely exposed. A triangle-tip knife with Endocut mode was used for the mucosal incision, starting from 25 cm to 37 cm from the incisors (Fig. 4).

The procedure was relatively easy, quick, and uncomplicated (Video 1). After the procedure, the patient experienced mild, self-limiting fever. CT scan and Gastrografin swallow showed no leakages or complications, and the patient immediately restarted oral feeding. At 1-year follow-up, the patient was in good condition, without dysphagia.

In this case, it is unknown when the dehiscence of the mucosotomy occurred, but a strong and secure fibrotic reaction prevented any leakage. Food entrapment within the false lumen and dysphagia were the main symptoms. Incision of the mucosal flap along the false esophageal lumen, a kind of fistulotomy, guaranteed a quick solution to an unusual clinical problem [4].

Endoscopy_UCTN_Code_TTT_1AO_2AN

Competing interests

Dr. G. Costamagna is a member of the advisory board of Cook Medical, Olympus Co. and Johnson & Johnson. He received a Research Grant from Boston Scientific Inc. and Apollo Endosurgery Inc.

Dr. I. Boskoski is a consultant for Apollo Endosurgery, Cook Medical and Boston Scientific. He received a Research Grant from Apollo Endosurgery. He is a member of the scientific board of EndoTools.
Video 1: Esophagogastroduodenoscopy revealed multiple tears of the mucosal flap, and a large communication between the esophagus and the submucosal tunnel. The mucosal flap was cut, to avoid food entrapment within the false lumen.

The authors

Pietro Familiari1,2, Rosario Landi1, Francesca Mangiola1, Camilla Vita1, Ivo Boskoski1,2,3, Andrea Tringali1,2,3, Guido Costamagna1,2,3
1 Fondazione Policlinico Universitario A. Gemelli IRCCS, Digestive Endoscopy Unit, Rome, Italy
2 Università Cattolica del Sacro Cuore, CERTT, Centre for Endoscopic Research, Therapeutics and Training, Rome, Italy
3 IHU-Strasbourg, Institute of Image-Guided Surgery, Strasbourg Cedex, France

Corresponding author

Pietro Familiari, MD, PhD
Digestive Endoscopy Unit, Fondazione Policlinico Universitario A. Gemelli IRCCS, Università Cattolica del Sacro Cuore, Largo Gemelli 8, 00168 Rome, Italy
Fax: +39-06-30156581
pietro.familiari@policlinicogemelli.it

References


Bibliography

DOI https://doi.org/10.1055/a-1173-7623
Published online: 2020
Endoscopy
© 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