Infected esophageal subepithelial hematoma after peroral endoscopic myotomy for achalasia successfully treated with double-pigtail stent drainage

Peroral endoscopic myotomy (POEM) has proven similarly effective to and less invasive than laparoscopic Heller myotomy and become the preferred option for the treatment of esophageal achalasia [1]. Few post-operative adverse events have been reported, among them a very low incidence of delayed bleeding causing a submucosal hematoma that could be treated with conservative management [2, 3].

We report a case of a 47-year-old man who underwent a successful POEM for a type of esophageal achalasia. He was readmitted to our center 10 days later for worsening epigastric pain with fever. A CT scan showed a right-side esophageal subepithelial collection (► **Fig. 1**). An infected submucosal hematoma was diagnosed. Despite initial conservative treatment with a broad-spectrum antibiotic and anti-fungal, the patient continued to be septic. After multidisciplinary discussion, we decided to drain the submucosal abscess endoscopically. During the procedure (► **Video 1**), a small ulcerated orifice with discharged pus was seen on the previous POEM tunnel. We cannulated the submucosal space via this orifice with a guidewire and then placed a 7 French double-pigtail stent under endoscopic ultrasound control and fluoroscopic guidance (► **Fig. 2**). A significant clinical and biological improvement was achieved, and the patient was discharged home the next day with an oral antibiotic. A 10-day follow-up CT scan revealed complete resolution of the collection with the stent in place, which was planned for removal in 1 month (► **Fig. 3**). Even though a post-POEM submucosal hematoma is rare and can resolve spontaneously, infection can occur and might require additional management. The feasibility and efficacy of endoscopic transmural drainage of an intra-abdominal collection was already well established [4]. It was also demonstrated to be feasible for a gastric wall abscess after endo-

► **Fig. 1** CT scan shows a large esophageal tunnel hematoma.

► **Video 1** Successful double-pigtail stent drainage of infected esophageal subepithelial hematoma after peroral endoscopic myotomy for achalasia.

scopic submucosal dissection [5]. We believe that this is the first case of an infected hematoma post-POEM for which a short procedure of endoscopic drainage was also very effective.

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► **Fig. 2** Endoscopic drainage procedure. **a** Small ulcerated orifice on the previous POEM tunnel. **b** Insertion of 7 French double-pigtail stent. **c** Guidewire placement in the tunnel via the orifice. **d** Placement of 7 French double-pigtail stent under fluoroscopic guidance.

► **Fig. 3** 10-day follow-up CT scan showed complete resolution of the collection with the stent in place.

Competing interests

The authors declare that they have no conflict of interest.

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