

TREATMENT OF MUCOSAL TEARS IN THE ESOPHAGUS WITH ENDOSCOPIC CLIPS



Adolfo Parra-Blanco, M.D.

Department of Gastroenterology, Canarias University Hospital, Santa Cruz de Tenerife, Spain

HISTORY

A 73-year-old male underwent an upper endoscopy for the study of long-standing reflux symptoms. The examination was done under conscious sedation with poor tolerance, in spite of the administration of 100 µg of Fentanyl and 7 mg of Midazolam, and nausea accounted repeatedly during the procedure.

During the initial passage of the endoscope in the esophagus, a long segment of Barrett's esophagus was detected, with no other gross abnormalities. On withdrawal, two tears were found in the lower end of the columnar epithelium, proximally to the cardia: a shallow 1 cm tear (located at 6 o'clock – Figure 1) and a deep 3 cm tear (located at 3 o'clock – Figure 1).

PROCEDURE

The affected area was flushed with water in order to have a clear view of the lesion. The bottom of the tear was inspected in detail and no signs of perforation were evident. There was some oozing from the tear and a decision was made to suture the mucosal defect in order to prevent further complications such as delayed bleeding or perforation.

Five Resolution® Clips were applied and attached consecutively in a distal to proximal order (Figure 2). The reason for this is that the clips initially applied may hamper the precise application of further clips, and it is easier to check the mucosal defect remaining to be sutured if the direction is from distal to proximal. This aspect is important, because although clipping is considered to be almost devoid of any risks, there is a possibility that a clip incorrectly placed at the bottom of a mucosal defect instead of grasping normal mucosa at the edge of the lesion can result in a perforation.

The tear was successfully sutured with five Resolution Clips, which were placed easily (Figure 3). The extent of the Barrett's esophagus was C5M8 according to the Prague Classification. No biopsies were taken to confirm the diagnosis. The patient remained asymptomatic and was discharged after observation.

POST PROCEDURE

The patient was on high dose PPI. Four months later in a second endoscopy, no trace of the tear was found, but random biopsies revealed high-grade dysplasia in the Barrett's epithelium. A third endoscopy was performed in order to try to locate any dysplastic areas, and two small erosions were found in a Barrett's tongue (Figure 4). Biopsy taken from both areas revealed high-grade dysplasia and an endoscopic mucosectomy is planned.

Mucosal tears in the esophagus may occur during diagnostic or therapeutic endoscopy, but they are very infrequent and underlying conditions such as eosinophilic esophagitis should be ruled out. Resolution Clips are a valuable tool for the management of intraprocedural complications (bleeding and perforations).

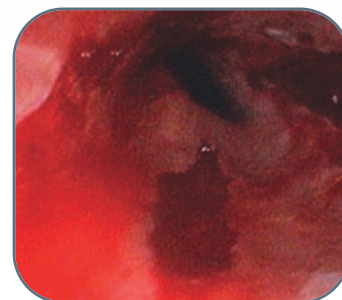


Figure 1

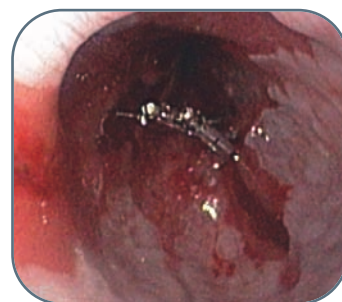


Figure 2



Figure 3

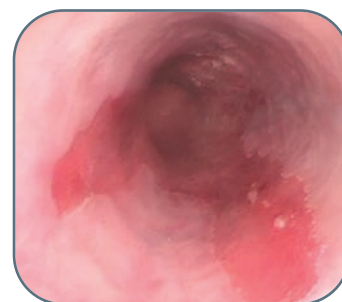


Figure 4