Actinomycosis associated with a permanently implanted duodenal over-the-scope clip

The over-the-scope (OTS) clip system is a safe and effective endoscopic therapy for gastrointestinal bleeding, perforation, and leakage [1, 2]. A recent review reported an overall complication rate of 1.7% [1]. We report the case of a 76-year-old woman with a complication that arose 11 years after the placement of two OTS clips (Ovesco Endoscopy AG, Tübingen, Germany). The patient had undergone resection by hybrid endoscopic submucosal dissection of a 25-mm duodenal adenoma 11 years previously. The procedure was technically difficult owing to fibrosis and was ultimately complicated by a microperforation, which was managed by the placement of two OTS clips. Histology revealed a tubulovillous adenoma with low grade dysplasia. Follow-up esophagogastroduodenoscopies showed no signs of recurrence. Biopsy specimens of the scar revealed regenerative mucosa with hyperplastic changes. Both OTS clips stayed in place for 8 years, after which spontaneous dislodgement of one OTS clip occurred. Endoscopic examination then revealed a non-dysplastic mucosal bridge – double lumen appearance of the duodenum – with one clip still correctly placed.

Eventually 11 years after placement of the OTS clips, the mucosa surrounding the remaining clip had a villous aspect (Fig. 1); biopsies were taken, which were positive for Actinomyces (Fig. 2). A computed tomography scan was performed, which was negative for regional lymphadenopathy and regional spread. Following multidisciplinary discussion, a penicillin-based treatment was proposed and the OTS clip was successfully extracted. A decision was made not to cut the mucosal bridge, because the patient was asymptomatic. At 6-month follow-up, no signs of recurrence were present (Video 1). Abdominopelvic actinomycosis in immunocompetent people has been described.
In the literature, an association with foreign bodies has been reported, predominantly with intrauterine contraceptive devices [3]. To our knowledge, this is the first published case of actinomycosis occurring in relation to an OTS clip.

Competing interests

The authors declare that they have no conflict of interest.

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References