An emergency esophagogastroduodenoscopy performed in a dyspeptic 19-year-old girl with hematemesis, abdominal pain, and anemia (Fig. 1) revealed a polypoid esophageal mass with distal erosion. A subsequent CT scan confirmed the bulky lesion (14 × 4 × 3.5 cm) extending from the carina to the cardia level. Both extraesophageal extension and nodal and extranodal metastases were excluded. The extent and location of the mass ruled out any endoscopic resection and a total esophagectomy with gastric pull-up was performed. Both histology and immunophenotyping (positive for vimentin, MNF116, and smooth muscle actin; negative for S100 and CD117) were consistent with the “classical variant” of inflammatory myofibroblastic tumor (IMT). A prominent eosinophilic infiltrate (Fig. 2a–c) was also present, spreading from the lesional to the extralesional area, where the squamous epithelium featured rich eosinophilic infiltrate, fully consistent with eosinophilic esophagitis (Fig. 2d).

Within the upper gastrointestinal tract, IMTs are rare [1], polymorphic clinicopathological entities that have been associated with gastric ulcers [2], ischemic disease, and gastroesophageal reflux [3]. In accordance with these clinical settings, the hypothesis of IMT as an “exaggerated reparative response” has been established. In eosinophilic esophagitis, the promoting role for eosinophils in the onset of subepithelial fibrosis is supported by the high transcript levels of both interleukin-5 and TGF-β detected in tissue samples from lesions [3–5]. Most recently, this hypothesis has been validated in murine models of eosinophilic esophagitis, where eosinophilia leads to collagen accumulation, finally resulting in esophageal wall remodeling [5]. A causative role for eosinophilic esophagitis is further sustained by the clinical finding that more than 50% of cases of eosinophilic esophagitis coexist with fibrotic esophageal strictures (e.g., Schatzki rings and esophageal webs), which might be seen as part of the same “tumorigenic field” in which IMT may develop.

The clinical observation of a young patient with concomitant eosinophilic esophagitis and IMT, supported by recent experimental and molecular evidence, suggests that IMTs can definitely be considered among the unfavorable outcomes of (long-standing) eosinophilic esophagitis.

**Fig. 1** Endoscopic ultrasonography showing a nonhomogeneous solid mass originating from the inner esophageal layers and involving mucosa and submucosa.

**Fig. 2** a–d Histological and immunohistochemical features observed in the present case.

---

**Endoscopy_UCTN_Code_CCL_1AB_2AC_3AB**

M. Fassan1, C. Castoro2, A. J. Saenz4, M. Cagol3, V. Ninfo1, M. Rugge1

1 Pathology Unit, Department of Medical Diagnostic Sciences and Special Therapies, University of Padua, Italy
2 Surgery Unit, Istituto Oncologico Veneto IOV-IRCCS, Padua, Italy
3 Surgery Unit, Department of Medical and Surgical Sciences, University of Padua, Italy
References

1. Makhlouf HR, Sobin LH. Inflammatory myofibroblastic tumors (inflammatory pseudotumors) of the gastrointestinal tract: how closely related to inflammatory fibroid polyps? Hum Pathol 2002; 33: 307–315

Bibliography

Endoscopy 2009; 41: E95–E96
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

M. Rugge, MD
II Cattedra di Anatomia Patologica
Università degli Studi di Padova
Istituto Oncologico Veneto-IRCCS
Via Aristide Gabelli, 61
35121 Padova
Italy
Fax: +39-049-8272277
massimo.rugge@unipd.it