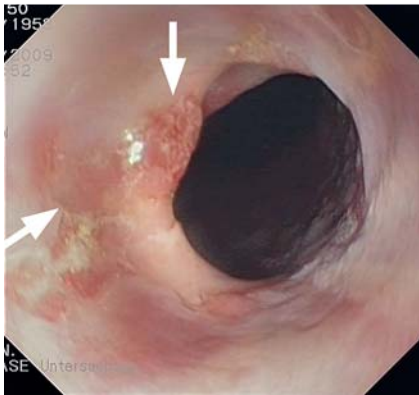
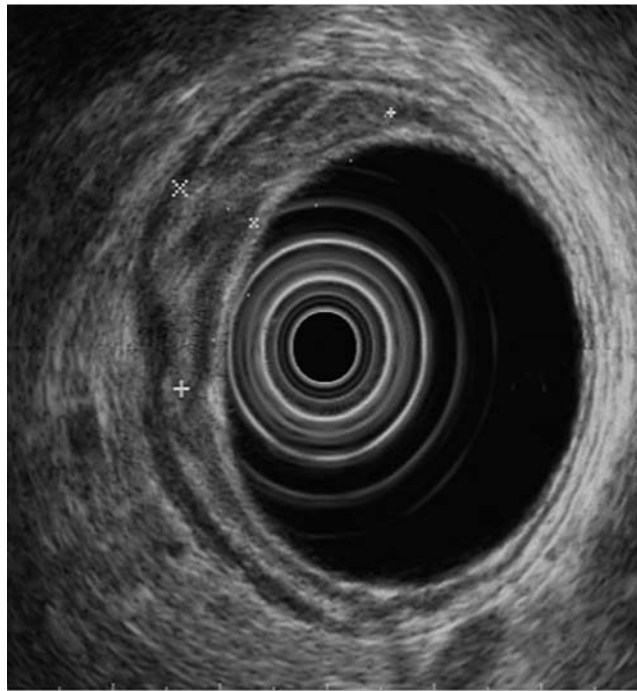


## Cytomegalovirus-esophagitis as initial presentation of HIV infection mimicking adenocarcinoma



**Fig. 1** Edge (left arrow) and ulcerated field (right arrow) of a tumor mass.



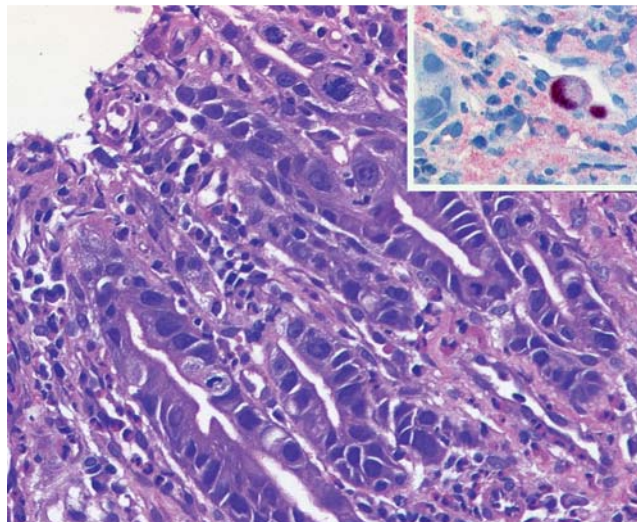
**Fig. 2** Endoscopic ultrasound showed an intact muscular layer.

A 49-year-old man presented with dysphagia and weight loss of 5 kg within 2 months. An esophagogastroduodenoscopy (EGD) was performed in a community hospital. An ulcerated tumor of the cardia was seen and a biopsy was interpreted as a well-differentiated adenocarcinoma. The patient was referred to our hospital to complete the staging and initiate surgical intervention. The EGD was repeated and the previously described cardiac tumor was confirmed (▶ **Fig. 1**).

An endoscopic ultrasound (EUS) revealed a 30 × 8 mm tumor (▶ **Fig. 2**).

The mucosal and submucosal layers could not be delineated but the muscular layer was intact. The macroscopic view resulted in the diagnosis of an early gastric cancer uT1sm and consequently surgical management was considered. In addition, the histologic examination revealed a damaged mucosal architecture and epithelial cells with atypia. In parallel, the medical history revealed homosexual preferences of the patient; HIV-testing was initiated. The viral load was 464 000/copies/mL and CD4 T-cell count was 30/μL. Because of the novel aspect of an immunosuppressive state, the diagnosis of cytomegalovirus (CMV)-gastroesophagitis was considered, and we requested the biopsies from the local pathology center for re-evaluation. Immunohistochemical examination of all biopsies indicated the presence of multiple CMV pp65-positive cells (▶ **Fig. 3**).

The most common presentation of CMV-esophagitis are well-circumscribed ulcerations, which can differ in number, size,

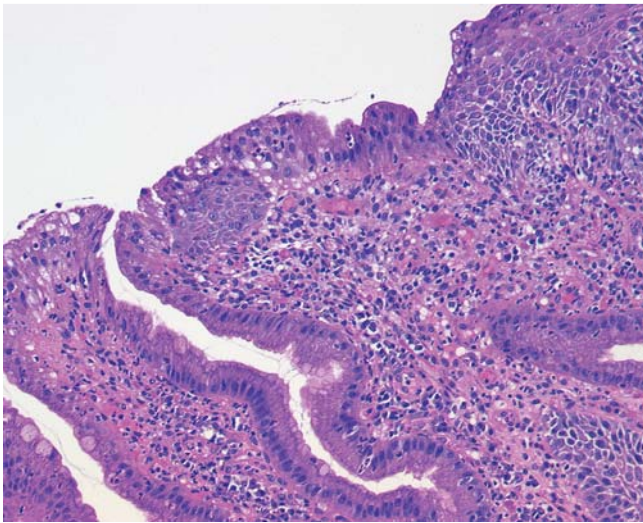


**Fig. 3** Histologic examination and immunohistochemical staining showed cytomegalovirus-positive cells.

and depth [1]. Although the appearance is endoscopically highly variable, an ulcerated, bulged, and irregularly circumscribed tumor is a rare condition. The surgical intervention was delayed and treatment with ganciclovir was initiated. After CMV therapy EGD and EUS were repeated. Only a small ulcer of the cardia remained and EUS was normal. The histologic investigation revealed inflammation and mild regenerative features (▶ **Fig. 4**).

In summary this case demonstrates the difficulties in differentiating between an inflammatory process and an invasive tumor by endoscopy, ultrasound, and histology [2,3], and underlines the importance of a detailed medical history. By re-evaluating the diagnosis, the patient was saved from an esophagocardiac resection.

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**Fig. 4** Regeneration of cytoarchitecture after treatment for cytomegalovirus.

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## References

- 1 Wilcox CM, Straub RF, Schwartz DA. Prospective endoscopic characterization of cytomegalovirus esophagitis in AIDS. *Gastrointest Endosc* 1994; 40: 481–484
- 2 Neumann H, Fry L, Wilcox C et al. Gastrointestinal imaging in HIV. *J HIV Ther* 2008; 13: 58–64
- 3 Singh SP, Odze RD. Multinucleated epithelial giant cell changes in esophagitis: a clinicopathologic study of 14 cases. *Am J Surg Pathol* 1998; 22: 93–99

## Bibliography

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