Hypertrophic gastric folds caused by metastatic prostate adenocarcinoma

The stomach represents an unusual site for metastatic lesions, and secondary tumors mimicking diffusely infiltrating primary gastric cancer are exceptionally rare [1]. With respect to prostate cancer, metastases to the upper gastrointestinal tract have only infrequently been described, and published data are mainly confined to single case reports [2–4].

A 69-year-old man diagnosed with prostate cancer 8 years earlier underwent upper endoscopy for unspecific abdominal discomfort. Inspection of the stomach revealed diffuse hypertrophic gastric folds within the upper third of the stomach (Fig. 1). Upon histological examination, the gastric oxyntic-type mucosa was found to be diffusely infiltrated by polymorphous cancer cells with enlarged irregular nuclei and cytoplasmic vacuolization (Fig. 2). The cancer cells were immunoreactive for prostate-specific antigen (PSA) (Fig. 3a) and androgen receptor (Fig. 3b). The MIB-1 proliferation index was 25%.

Within the gastrointestinal tract, metastatic cancer is most often encountered as a solitary lesion resembling a submucosal tumor with or without a central depression and/or (“volcano”-like) mucosal ulceration. The lesions are typically located in the middle or upper third of the stomach [1]. Diffuse thickening of gastric folds and/or linitis plastica-like changes due to a secondary tumor are exceedingly rare and have, so far, mainly been reported for metastatic breast cancer [5]. To the best of our knowledge, metastatic disease due to prostate cancer has only once before been reported as a cause of hypertrophic gastric folds [4].

Differential diagnoses mainly include: Ménétrier’s disease, a rare hyperproliferative protein-losing gastropathy; lymphocytic gastritis, a rare variant of gastritis which is mainly associated with Helicobacter pylori infection; gastric lymphoma; and primary gastric cancer.

In conclusion, we present a case of hypertrophic gastric folds caused by metastatic prostate adenocarcinoma. Endoscopists should consider gastric metastasis in the work-up of patients with known malignancies who present with hypertrophic gastric folds.

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Fig. 1 Hypertrophic folds arising within the upper third of the stomach.

Fig. 2 Polymorphous cancer cells diffusely infiltrating gastric oxyntic-type mucosa.
Fig. 3 The cancer cells are immunoreactive for: a prostate-specific antigen (PSA) and b androgen receptor.

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