

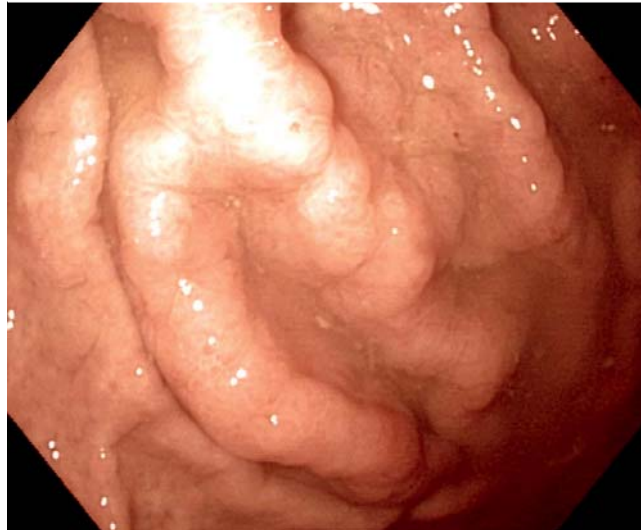
## Hypertrophic gastric folds caused by metastatic prostate adenocarcinoma

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%.

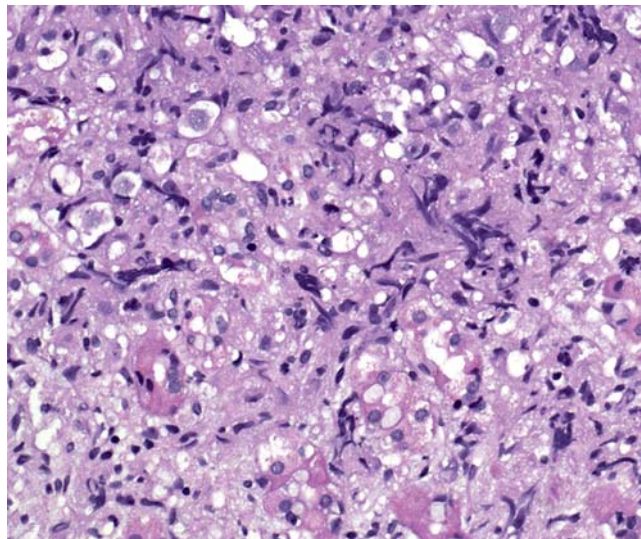
Within the gastrointestinal tract, metastatic cancer is most often encountered as a solitary lesion resembling a submucosal tumor with or without a central depression and/or (“volcano”-like) mucosal ulceration. The lesions are typically located in the middle or upper third of the stomach [1]. Diffuse 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.



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



**Fig. 2** Polymorphous cancer cells diffusely infiltrating gastric oxyntic-type mucosa.

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**Competing interests:** None

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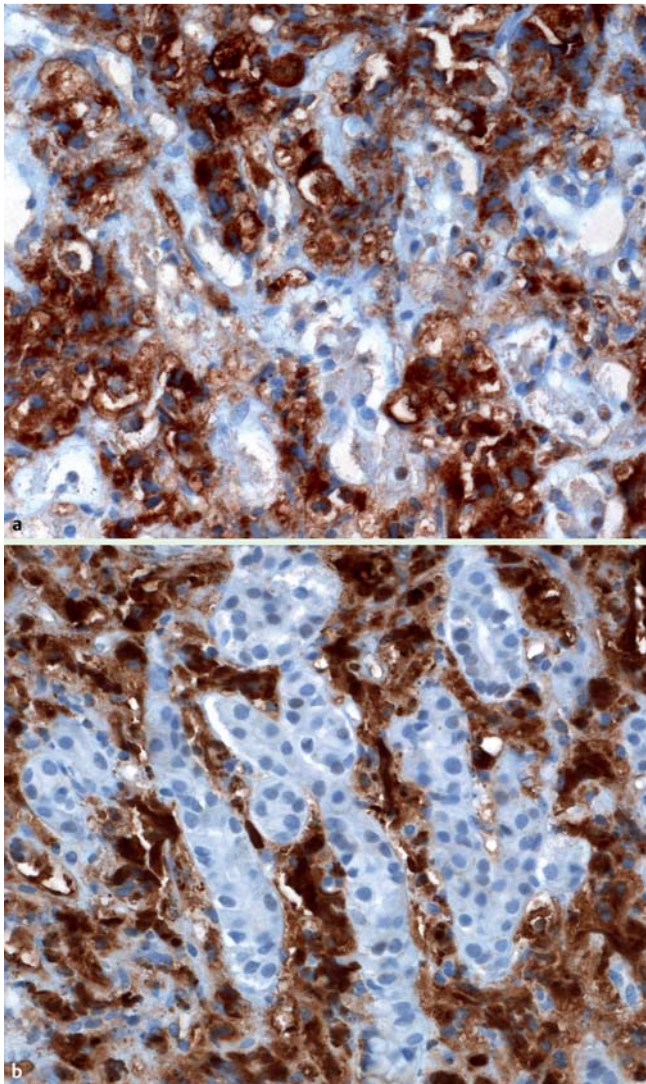
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### References

- 1 Oda I, Kondo H, Yamao T et al. Metastatic tumors to the stomach: analysis of 54 patients diagnosed at endoscopy and 347 autopsy cases. *Endoscopy* 2001; 33: 507–510
- 2 Holderman WH, Jacques JM, Blackstone MO et al. Prostate cancer metastatic to the stomach: clinical aspects and endoscopic diagnosis. *J Clin Gastroenterol* 1992; 14: 251–254
- 3 Christoph F, Grünbaum M, Wolkers F et al. Prostate cancer metastatic to the stomach. *Urology* 2004; 63: 778–779
- 4 Onitilo AA, Engel J, Resnick JM. Prostate carcinoma metastatic to the stomach: report of two cases and review of the literature. *Clin Med Res* 2010; 8: 18–21
- 5 Whitty LA, Crawford DL, Woodland JH et al. Metastatic breast cancer presenting as linitis plastica of the stomach. *Gastric Cancer* 2005; 8: 193–197



**Fig. 3** The cancer cells are immunoreactive for: **a** prostate-specific antigen (PSA) and **b** androgen receptor.

#### **Bibliography**

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