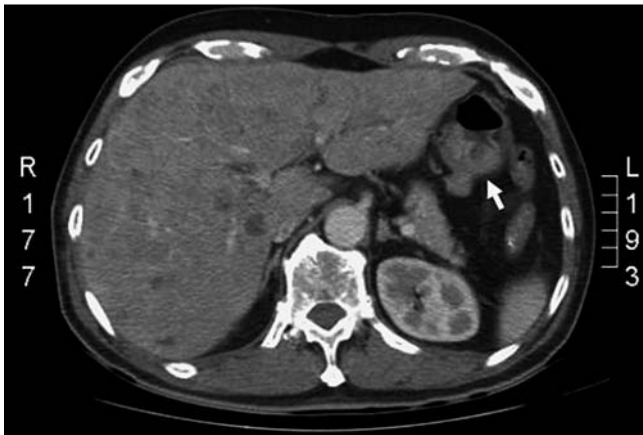


## Endoscopic diagnosis of a gastric small cell carcinoma with liver metastasis



**Fig. 1** Contrast-enhanced computed tomography, showing multiple hepatic tumors over both lobes and an enhancing mass at the mid gastric body (arrow).



**Fig. 2** Endoscopic view showing a mucosal bulge with central ulceration at the mid gastric body.

Primary small cell carcinomas of the stomach are extremely rare, accounting for less than 0.1% of primary gastric cancers [1]. The clinical behavior of primary gastric small cell carcinoma is as aggressive as that of small lung cancer [2]. Distal metastases are frequently observed at initial presentation [3]. Small cell carcinomas proliferates mainly in the submucosal layer like a carcinoid tumor [1,4]; however, the tumor may have endoscopic features identical to those of gastric adenocarcinoma [1]. Preoperative diagnosis of gastric small cell carcinoma is difficult because of its histological heterogeneity and microscopic resemblance to malignant lymphoma or undifferentiated adenocarcinoma [1,4]. We report here a case of primary small cell carcinoma of stomach with liver metastasis, which was correctly diagnosed with endoscopic and liver biopsy.

A 71-year-old man was referred to our institution for evaluation of multiple hepatic tumors. His past medical history was unremarkable. Physical examination revealed jaundice and a slightly distended abdomen. Laboratory data included a hematocrit of 40.9% (normal 42%–52%) and a total bilirubin level of 3.2 mg/dl (normal 0.2–1.2 mg/dl); the alpha-fetoprotein level was within normal limits. Chest radiography was unremarkable. Contrast-enhanced computed tomography showed multiple hepatic tumors over both lobes and an enhancing mass at the mid gastric body (Fig. 1).

Upper endoscopy revealed a mucosal bulge with central ulceration at the mid gastric body (Fig. 2).

The histopathological assessment of the biopsy specimens demonstrated nests of small cells with hyperchromatism and scanty cytoplasm (Fig. 3a).

Immunohistochemical staining revealed positivity for chromogranin (Fig. 3b) and CK7 (Fig. 3c). Immunostains for CEA, CK20, S100, TTF-1, and P53 were negative. Similar histopathological findings were obtained from the biopsy specimens taken from the liver tumors. A diagnosis of gastric small cell carcinoma with liver metastasis was made. The patient refused chemotherapy and died of hepatic failure 3 months later.

**Competing interests:** None

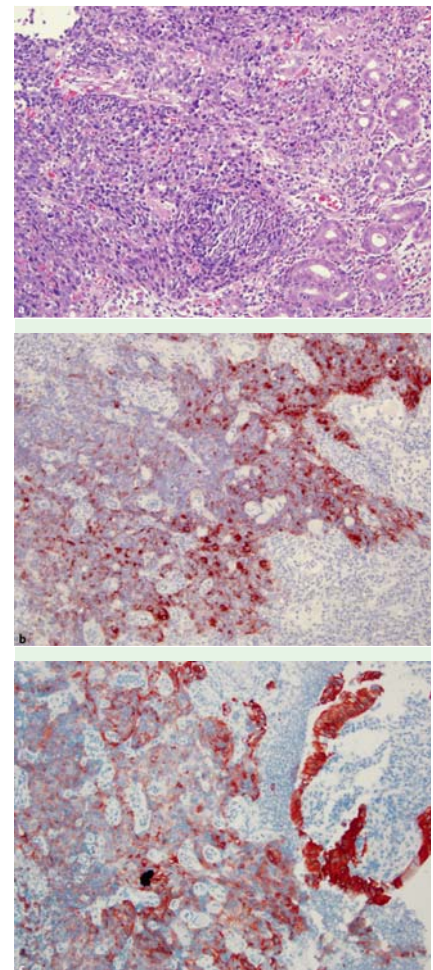
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**Fig. 3** a Photomicrograph showing nests of small cells in the gastric mucosa with hyperchromatism and scanty cytoplasm (hematoxylin and eosin, magnification  $\times 40$ ). b Immunohistochemical staining positive for chromogranin. c Immunohistochemical staining positive for CK7.

## References

- 1 Kusayanagi S, Konishi K, Miyasaka N *et al*. Primary small cell carcinoma of the stomach. *J Gastroenterol Hepatol* 2003; 18: 743–747
- 2 Namikawa T, Kobayashi M, Okabayashi T *et al*. Primary gastric small cell carcinoma: report of a case and review of the literature. *Med Mol Morphol* 2005; 38: 256–261
- 3 Vrouvas J, Ash DV. Extrapulmonary small cell cancer. *Clin Oncol (R Coll Radiol)* 1995; 7: 377–381
- 4 Tanemura H, Ohshita H, Kanno A *et al*. A patient with small-cell carcinoma of the stomach with long survival after percutaneous microwave coagulating therapy (PMCT) for liver metastasis. *Int J Clin Oncol* 2002; 7: 128–132

## Bibliography

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