Synchronous pancreatic and gastric metastasis from an ovarian adenocarcinoma diagnosed by endoscopic ultrasound-guided fine-needle aspiration

Metastasis of ovarian carcinoma to the stomach [1–5] or pancreas [6, 7] is uncommon. Furthermore, synchronous metastasis of ovarian adenocarcinoma to the stomach and pancreas has never been reported. We report here the detection of synchronous metastasis to both the stomach and pancreas from a resected ovarian papillary serous cystadenocarcinoma.

At 25 months after gynecological surgery, a gastric submucosal mass and pancreatic masses were noted on follow-up computed tomography in an asymptomatic 51-year-old woman. Contrast-enhanced computed tomography showed a 4.6 × 4.2-cm intramural mass (yellow arrows) in the gastric antrum is suggestive of a gastric submucosal tumor. A 1.0 × 1.0-cm mass (yellow arrows) in the pancreatic body exhibits slight enhancement in the early phase.

The serum cancer antigen 125 (CA-125) level was high (89 U/mL; normal < 35 U/mL). The patient underwent esophagogastroduodenoscopy (EGD), which showed a 3-cm subepithelial mass at the antrum. The lesion was located mainly in the fourth layer. Endoscopic ultrasound (EUS) demonstrated that the lesion was located mainly in the fourth layer. In addition, two pancreatic lesions, measuring 7 × 5 mm and 4 × 3 mm, were identified in the pancreatic body. EUS-guided fine-needle aspiration (EUS-FNA) of the gastric and pancreatic lesions was performed, and microscopic examination showed a group of cells with rounded borders and round to oval nuclei in a papillary arrangement.
Immunohistochemical study revealed positivity for cytokeratin 7 (++), CA-125 (+), estrogen receptor (+ +), progesterone receptor (+), and negativity for cytokeratin 20 (–) and CDX-2 (–). The pathological features were similar to those of the previous ovarian lesion. The final pathological diagnosis was metastatic tumor from a primary ovarian carcinoma. In conclusion, a possible diagnosis of gastric and pancreatic metastasis of ovarian papillary serous adenocarcinoma should be kept in mind in a patient with an unknown primary lesion, even one with a remote history of ovarian malignancy. EUS-FNA in conjunction with immunohistochemistry is a useful tool for diagnosing metastatic lesions.

Competing interests: None

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Fig. 4 Linear array endosonography shows multiple hypoechoic masses in the pancreatic body.

Fig. 5 Microscopic examination shows a group of cells with rounded borders and round to oval nuclei in a papillary arrangement (hematoxylin and eosin stain, × 400).

Microscopic examination shows a group of cells with rounded borders and round to oval nuclei in a papillary arrangement (hematoxylin and eosin stain, × 400).