Case report

Carcinoid tumour presenting as a giant hepatic cyst

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Cystic liver metastases from carcinoid tumours are seldom reported. The extent of the process and the absence of symptoms distinguish the present case from those previously described.

Case report

A 52-year-old woman presented with discomfort of the abdomen. The patient had noted an increase in abdominal girth but had no other symptoms. Examination revealed hepatomegaly. Ultrasonography showed a polycystic mass in the liver with a craniocaudal diameter of 20 cm which was confirmed with computed tomography. Neuroendocrine cells, possibly from a carcinoid tumour, were obtained with percutaneous fine-needle aspiration cytology. A $[^{111}]$In-diethyleneetriamine penta-acetate-octreotide scan demonstrated increased radioactivity in the liver with no metastases elsewhere. A repeat computed tomogram 3 years later showed enlargement of the mass to 30 cm (Fig. 1).

At laparotomy 8 litres of fluid was evacuated from the cyst, which was then excised with its necrotic contents. The right hepatic lobe had been displaced into the left lower abdomen owing to the extent of the tumour, which seemed to arise near the falciform ligament. The small bowel, appendix and pancreas were carefully examined, but showed no signs of primary tumour. Histopathological examination revealed a cystic neuroendocrine tumour (atypical carcinoid). Somatostatin, chromogranin-A and Grimelius silver staining were negative; neuron-specific enolase, calcitonin, pancreatic polypeptide were positive. A postoperative octreotide scan revealed multiple bony metastases. The patient is alive and well 1 year after operation. She will be treated with a somatostatin analogue.

Discussion

Cystic degeneration of carcinoid tumours is rare and probably results from ischaemic necrosis of liver metastases. In a prospective study of 103 patients with carcinoid tumours, Norheim et al. found hepatic metastases in 93 patients; none was cystic.

The lack of carcinoid symptoms in the patient described here was striking. Specific symptoms may be lacking in atypical carcinoids because conversion of 5-hydroxytryptophan in serotonin is disturbed.

The present case demonstrates that necrosis of a carcinoid metastasis should be considered in patients with cystic liver lesions, even if there are no symptoms of the carcinoid syndrome. An octreotide scan is a valuable diagnostic technique in such patients.

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References