Oedema and thoracoepigastric vein dilation on bilateral legs: adrenal gland tumour with inferior vena cava tumour thrombus

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DESCRIPTION

An 86-year-old man presented with a 1-month history of progressive oedema of both legs. His medical history included stage IV non-small cell lung cancer (adenocarcinoma) with mediastinal lymph node metastasis, and he had been on cisplatin and gemcitabine for 1 year. Physical examination revealed oedema of lower extremities and dilation of the thoracoepigastric vein (figure 1). A right upper quadrant mass was palpated. Contrast-enhanced CT revealed a 61×65 mm adrenal gland tumour with a heterogeneous and irregular margin, along with an inferior vena cava (IVC) tumour thrombus extending into the right atrium (figure 2). His adrenal gland function was normal. Percutaneous biopsy of the right mass revealed adenocarcinoma. We clinically diagnosed the tumour as adrenal metastasis from lung cancer.

IVC tumour thrombi are known to originate from renal cell carcinomas, hepatic cell carcinomas, adrenal gland tumours, testicular cancer and angiolipomas, although lung carcinoma directly involving IVC is rare.¹ Adrenal gland tumours invading the IVC have been observed in 9–19% of all cancer cases including primary and metastasis.² Distention of the thoracoepigastric vein indicates development of collateral venous circulation due to IVC obstruction. Collateral pathways form along the posterior abdominal wall. Distention of

Figure 2 Contrast-enhanced CT revealed an adrenal gland tumour with inferior vena cava tumour thrombus (arrows).

the thoracoepigastric vein in a patient with leg oedema should raise suspicion of IVC obstruction, and distention of the superficial epigastric veins provides a diagnostic clue for IVC compression. Surgery for adrenal metastasis from adenocarcinoma lung cancer has a poor prognosis;³ the patient reported here received chemotherapy without surgery.

Learning points

- ▶ Adrenal gland tumours invading the inferior vena cava (IVC) have been observed in 9–19% of all cancer cases.
- ▶ Distention of the thoracoepigastric vein in a patient with leg oedema should raise suspicion of IVC obstruction.

Contributors All the authors were involved in managing the patient. KS and YO wrote the first draft. MI edited the manuscript.

Competing interests None declared.

Patient consent Obtained.

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Figure 1 Dilation of thoracoepigastric vein.

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