IVC tumoural thrombosis: an unusual complication of testicular tumour

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DESCRIPTION

A 30-year-old man presented with right scrotal mass and bilateral leg oedema for the last 3 months. CT scan showed a heterogeneously enhancing lesion in the right testis with retroperitoneal and mediastinal lymph node (LN) mass with enhancing tumorous thrombus filling the common iliac veins and inferior vena cava (IVC) up to the infrahepatic region with pulmonary metastases (figure 1). The preoperative tumour markers including lactate dehydrogenase, alpha-fetoprotein and human chorionic gonadotropin were 2270 U/L, 28 214 ng/mL and 6253 mIU/mL, respectively. High inguinal orchidectomy was carried out which revealed mixed germ cell tumour (GCT) (pT3N3M1aS3, poor risk as per International Germ Cell Cancer Collaborative Group). Chemotherapy including four cycles of VIP (etoposide, ifosfamide and cisplatin) with anticoagulation was started in the immediate postoperative period. Standard BEP (bleomycin, etoposide and cisplatin) ×four regimen could not be given because of poor pulmonary function. Postchemotherapy CT scan after 4 weeks revealed complete resolution of IVC thrombus with small residual retroperitoneal and mediastinal lymphadenopathy (figure 2). The tumour markers also normalised. The patient was kept under follow-up for residual mass as he refused postchemotherapy surgical resection.

GCT has propensity for lymphatic and haematogenous spread, but IVC tumour thrombosis is rare. Hassan *et al*[1] described few cases of GCT with IVC thrombosis and stressed that high index of suspicion is needed in right-sided testicular tumours associated with retroperitoneal LN masses >5 cm. IVC thrombosis in our case completely regressed after chemotherapy, although Dusaud *et al*[2] described rare regression of IVC thrombosis with chemotherapy alone, with patients ultimately requiring thrombectomy.

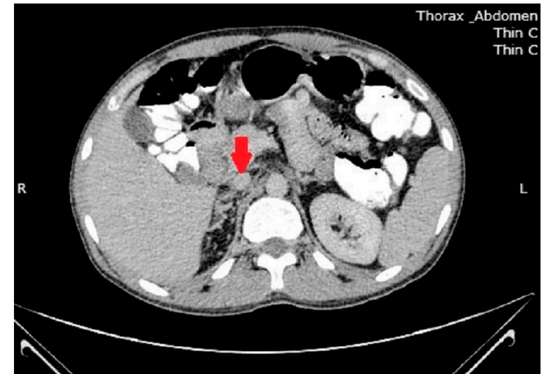

Figure 2 Postchemotherapy contrast-enhanced CT scan—complete resolution of inferior vena cava tumour thrombosis (arrow) after four cycles of VIP.

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Competing interests None declared.

Patient consent Obtained.

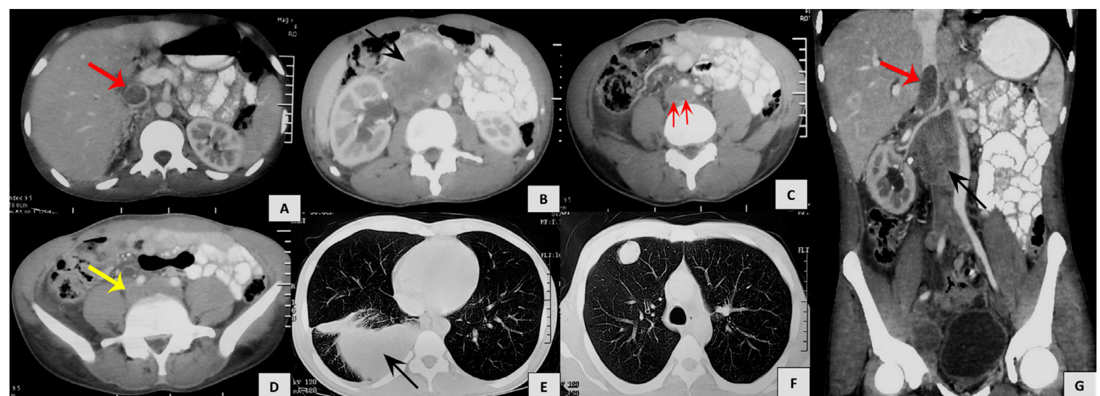

Figure 1 Contrast-enhanced CT scan. (A) Infrahepatic inferior vena cava (IVC) tumorous thrombosis (arrow) filling almost whole of the circumference. (B) Large heterogeneous enhancing retroperitoneal lymph nodal mass (arrow). (C) Bifurcation of IVC showing tumorous thrombosis (multiple arrows). (D) Tumour thrombosis extending up to bilateral common iliac veins (arrow), (E) showing hypodense opacity (arrow) in right lung lower lobe (collapse/consolidation) with minimal right pleural effusion, (F) showing pulmonary metastases. (G) Sagittal section showing IVC thrombosis (coloured arrow) with retroperitoneal lymph node mass (black arrow).

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Learning points

- ► Germ cell tumour has propensity for lymphatic and haematogenous spread, but inferior vena cava tumour thrombosis is rare.
- ► A high index of suspicion must accompany the evaluation of a patient with a right-sided primary testicular tumour and a paracaval abdominal mass measuring >5 cm in maximum transverse dimension.

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