

Superior vena cava syndrome associated with longstanding implantable central venous port

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DESCRIPTION

An 81-year-old woman was diagnosed with stomach cancer 4 years earlier, and underwent haemostatic radiotherapy followed by chemotherapy, for which

an implantable central venous port (figure 1) was placed. She subsequently underwent partial gastrectomy, with remission for nearly 3 years. She maintained regular surveillance, and presented with swelling of the neck and face accompanied by erythrocyanosis of these areas (figure 2). She also reported progressive swelling of both shoulders and upper extremities. On physical examination she was afebrile, haemodynamically stable, and had regular and rhythmic cardiac activity with facial cyanosis, and non-pitting oedema of head and neck with visible collateral circulation.

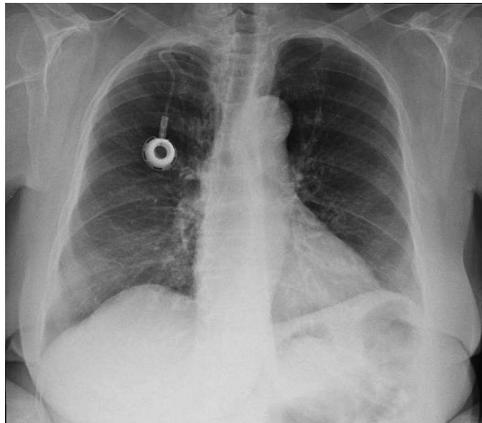


Figure 1 Chest X-ray showing longstanding implantable central venous port.



Figure 2 Photo of the patient revealing oedema and erythrocyanosis of face and upper torso.

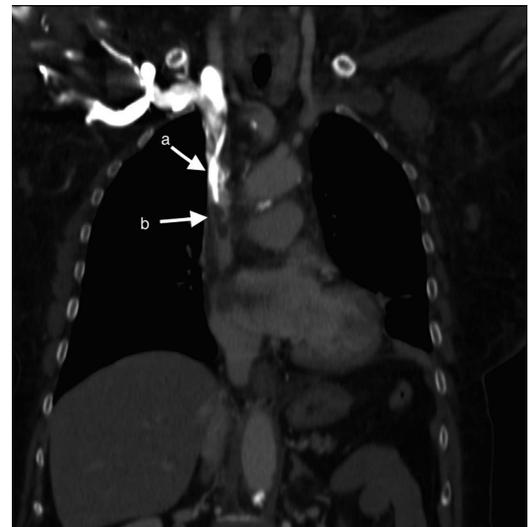


Figure 3 Chest CT scan with contrast showing (a) hyperintense image of the central venous port and (b) hypodense image of the central thrombus inside the superior vena cava.

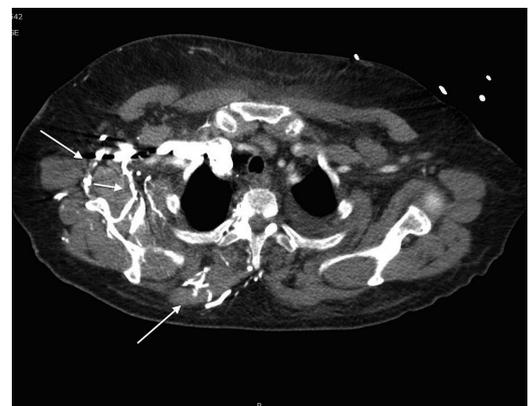


Figure 4 Chest CT scan showing extensive collateral circulation at the right chest wall and diffuse oedema of the subcutaneous tissue.



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A contrast-enhanced chest CT scan revealed intrinsic thrombosis of the superior vena cava, up to the right atrium, collateral circulation in the right chest wall and relatively diffuse oedema of the subcutaneous tissue (figures 3 and 4).

The diagnosis of superior vena cava syndrome associated with indwelling catheter was made and the patient was treated with unfractionated heparin infusion. She showed clinical improve-

ment, with regression of the oedema and facial cyanosis, and reduction of venous collateral circulation.¹⁻³

She was referred for removal of the central venous port, and medicated with oral anticoagulation with warfarin, to be maintained for at least 6 months.

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Learning points

- ▶ Superior vena cava (SVC) syndrome is usually suspected on the basis of medical history and physical examination, and can be confirmed by cross-sectional imaging.
- ▶ Indwelling venous catheter is a major cause of SVC thrombosis.
- ▶ Treatment should be guided by the severity of symptoms, aetiology of the obstruction, prognosis of the patient and treatment goals.

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