Thymoma complicated by deep vein thrombosis of the arm

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DESCRIPTION

Our patient was referred urgently with an anterior neck lump. The patient was otherwise well with no history of smoking or radiation exposure. Initial investigation with ultrasound-guided aspiration cytology was suspicious and atypical for thyroid carcinoma. A CT scan demonstrated the neck lump was part of a 64×56×54 mm retrosternal mass infiltrating the superior vena cava and atrium ([figure 1](#)).

Surgical biopsy and histological analysis demonstrated a mixed widely invasive thymoma P1 prominent with some P2 elements, Masaoka stage 3. A positron emission tomography-CT scan was arranged to identify any signs of metastasis ([figure 2](#)). Following extensive discussion between different specialities and centres, a surgical debulking thymectomy was performed, followed by adjuvant chemoradiotherapy. Following surgical resection, the tumour was staged as pT3N0M0. The tumour showed a good response to an ABVD regime (doxorubicin, bleomycin, vinblastine, dacarbazine) of chemotherapy and 54 Grey of radiotherapy split into 30 fractions over 42 days with a multiple conformal field technique.

After a good response to treatment, our patient had 18 months of disease remission, though,

Figure 1 CT scan demonstrating deep extension of retrosternal lesion into the anterior mediastinum, where a more focal 64×56×54 mm mass is seen. The mass is partly cystic, centred towards the left of the anterior mediastinum, and directly infiltrates the superior vena cava and atrium.

Figure 2 Fluorodeoxyglucose (FDG) labelled positron emission tomography-CT scan following injection of 352 Mbq of FDG. The 6 cm anterior mediastinal mass (as shown in [figure 1](#)) demonstrating irregularly increased FDG uptake. No local or distant metastasis was seen.

Figure 3 Doppler ultrasound of left upper limb veins. Ultrasound showing thrombus formation in the brachial vein. Doppler showing normal flow in the adjacent brachial artery (orange/yellow), while there is no demonstrable flow in the vein, consistent with the clinical picture of upper limb deep vein thrombosis.

unfortunately, during his surveillance, a CT scan identified disease recurrence. He also developed an acute swelling of the left arm shown by ultrasound to be a thrombus of the brachial, axillary and subclavian veins extending to the internal jugular vein ([figure 3](#)). This was successfully treated with anticoagulation consisting of low molecular weight heparin and direct factor Xa inhibitor (rivaroxaban). Following further multidisciplinary discussion, a regime of palliative chemotherapy has been started, though due to the rare nature of post-treatment recurrence it is difficult to offer accurate survival estimates.¹

Learning points

- ▶ Rare malignancies such as this require expertise of multiple specialties and, often, collaboration with specialist centres.
- ▶ Deep vein thromboses of the upper extremities can result from or be an indication of significant underlying disease.
- ▶ Anterior neck lumps do not always arise from the thyroid.

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