A fast growing sternal mass

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DESCRIPTION

An 80-year-old man, presented with local relapse, bony and lung metastasis 1 year following a resection of a sacral chordoma. He required chemotherapy and several procedures for improving his neurological symptoms in the cervical, thoracic and sacral vertebrae. Chordoma was diagnosed based on the morphological and immunohistochemistry results, which showed positive CK-8, CK-19, S-100, cadherin and negative CK-7 and CK-20.

At the same time an anterior 9×11×15 cm sternal mass was noticed (figures 1 and 2). The CT of the chest (figure 3) showed that it was compressing the right atrium and had multiple smaller lesions in the lungs and thoracic vertebrae. A CT of the abdomen and pelvis was normal apart from a cyst in the right kidney, which was the same size as from a previous scan. The tumour was not operated owing to the extensive bony and soft tissue destruction of the anterior chest wall and the involvement of right atrium and also because of the extent of the metastatic disease. It was therefore not biopsied.

Chordoma are malignant tumours arising from the primitive notochord remnants. A total of 49% arise from sacrococcygeal, 36% from cranial, nasopharyngeal and spheno-occipital and 15% from vertebral regions.¹ They can be locally destructive and tend to recur but have low potential of metastasis. However, disseminated metastatic disease has been reported in the literature and mostly occurs from primaries in sacrococcygeal region.¹ The chest wall metastasis was reported only twice.² In our case the history and image findings suggest that even though it had never been proven by histology, the possibility of sternal chordoma is most likely the case.

Figure 1 A picture of the sternal mass from the front.

Figure 2 A picture of the sternal mass from the right side.

Figure 3 CT of the chest with contrast showing the mass compressing the right ventricle.

Learning points

- ▶ Chordomas are locally aggressive and tend to relapse. A radical resection is paramount to prevent relapse and metastasis.
- ▶ Despite the low metastatic potential, metastasis has still been reported, but anterior chest wall is an uncommon site.

Competing interests None.

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