

Clinical Image

Long-standing Cannonball Metastases in Myxoid Chondrosarcoma: Multimodality Appearances of the Radiological Sign

Metástasis de larga duración en balas de cañón en el condrosarcoma mixoide: Presentaciones multimodales del signo radiológico

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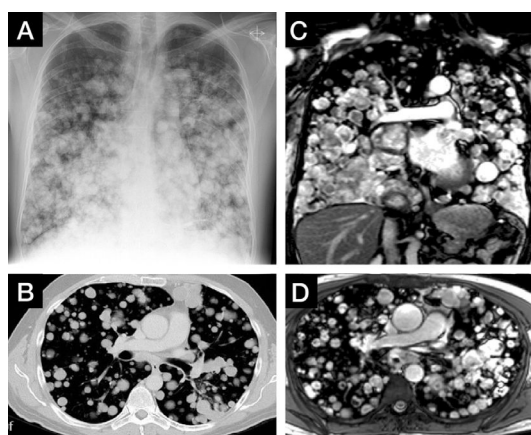


Fig. 1. Bilateral multiple, rounded, well-defined lesions are seen in posteroanterior chest radiograph (A), axial plane of CT study in maximum intensity projection (B) and MRI images of steady-state free precession sequence in coronal and axial plane (C, D). The chest radiograph was acquired a year prior to the CT and MRI studies.

A 50-year-old man with histologically confirmed metastatic extraskeletal myxoid chondrosarcoma was referred for cardiac assessment by cardiovascular Magnetic Resonance Imaging. Multiple large rounded well-defined bilateral pulmonary lesions, typical for cannonball metastases, were noted. There was no invasion into the heart nor central vessels. Computed Tomography and Chest Radiograph were reviewed (Fig. 1A–D). The patient received treatment with a tyrosine kinase inhibitor, following by only minimal progression of the pulmonary disease for eight years, as documented in the records.

The term “cannonball metastases” has been used at least since the 1960s.¹ The finding typically suggests haematogenous dissemination of renal cell carcinoma or choriocarcinoma to the lungs. Synovial sarcoma, prostate and endometrial cancer are less frequent causes. While extraskeletal myxoid chondrosarcoma can metastasise to the lungs, isolated pulmonary involvement is

very rare.² Non-neoplastic aetiology for multiple bilateral nodules includes vasculitis and haematogenous spread of infection, but these tend to have different ancillary features. Staphylococcus aureus pneumonia presents in a corresponding clinical setting as irregularly shaped variably-sized opacities that show a tendency to cavitation. Bilateral nodules may be seen in embolic conditions, e.g. in infective endocarditis – typically, as poorly-defined, smaller nodules that change in a matter of days and may have a feeding vessel or halo sign.

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Conflict of interests

Authors have no conflict of interests to declare.

References

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