Costal osteoid osteoma with chest pain

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DESCRIPTION

A 19-year-old man with no notable history had an acute episode of chest pain on the left side/back pain. Non-steroid anti-inflammatory drugs taken after consultation at another hospital were ineffective, and the pain persisted and intensified; therefore, he was referred to our hospital on day 2 after the onset. At the time of admission, his blood pressure was 128/64 mm Hg; pulse, regular at 66 bpm; respiration rate, 15 breaths/min; body temperature, 37.1 °C; and SpO₂, 98% (without additional oxygen support). Heart and breathing sounds were normal, and no rash was observed; however, tenderness was observed in the fourth–fifth intercostal space on the left side of the chest/back. Blood tests, ECG, chest and rib plain radiography, chest and abdomen contrast CT and echocardiography showed no abnormal findings. A thoracic CT image showed a ring-shaped radiolucency at the fourth rib root and sclerosis of the interior (a nidus; figure 1, white arrows). Bone scintigraphy revealed accumulation at the same site. Osteoid osteoma was suspected and bone tumour resection of the fourth rib was performed. A definitive diagnosis of osteoid osteoma was made after pathological examination. Figure 2 is the pathological image. A ring-shaped radiolucency in the CT image was commensurate with the nidus of osteoid osteoma (red arrow lesions). Osteoid osteoma often occurs in the long bones of the extremities in young people, and this

Figure 2 Pathological image.

condition is rarely observed in the chest bones¹; however, this condition must be considered in the differential diagnosis of chest pain.

Learning points

- ▶ A ring-shaped radiolucency in CT image is characteristic in osteoid osteoma.
- ▶ Osteoid osteoma in the chest bones must be considered in the differential diagnosis of chest pain.

Figure 1 Thoracic CT image.

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REFERENCE

- 1 Thakur NA, Daniels AH, Schiller J, *et al*. Benign tumors of the spine. *J Am Acad Orthop Surg* 2012;20:715–24.

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