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Images in...

A rare case of calcaneal tumour in a young adult

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DESCRIPTION

A young adult, presents to the emergency department with unilateral heel pain on-going for 4 years, with no history of trauma, getting worse in the last months. The pain felt was sharp, aching, with moderate severity, localised over the plantar area of the heel, worse during/after training or other strenuous activities involving that foot, and in the morning. The pain was relieved by rest and light analgesia. Overall examination was normal, except for mild discomfort in palpation of the neck of the calcaneus. X-rays showed a well-defined lesion in the neck of calcaneus (figure 1), and the MRI scan (figure 2) established that the lesion is a calcaneal intraosseous lipoma (IOL). According to the author's knowledge, first case of IOL was published in 1880.[1] IOL is a rare benign tumour (<0.1% of all primary bone tumours), calcaneus being the most common localisation (32%)[2] in the lower limb. In 1986, Dahlin reviewed 8452 bone tumours and found only six IOL's, none involving the foot or ankle.[3] Based on x-rays the main differentials for this lesion are: non-ossifying fibroma, simple bone cyst, aneurysmal bone cyst, giant cell tumour, fibrous dysplasia, bone infarct, chondroid tumour[2] or fungal infections. Most of the time this condition is asymptomatic and if discovered accidentally the management is conservative; when it causes pain or is large enough to lead to pathologic fractures there is an indication for surgical treatment: curettage with/without augmentation (natural or synthetic bone grafting materials), continuous decompression or steroid injection.

Figure 1 X-ray features. 30×26 mm large, well defined, expansile, lytic lesion localised in the neutral triangle of the neck of the calcaneus, with sclerotic walls and central calcification. Typical 'cockade image' – osteolytic area with distinct borders and central calcification. Arrow head marks peripheral area of the lipoma.

Learning points

- Rare presentation that requires differential diagnosis with malign tumours.
- This case presents a typical radiological aspect useful to diagnose this pathology.

Figure 2 MRI aspect. 32×21×29 mm large formation in the right calcaneus, well demarcated, with central necrosis and calcification, with hyper-intense signal on T1 and T2 weighted sequences corresponding to a Milgram stage II calcaneal intraosseous lipoma.

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Competing interests None.

Patient consent Obtained.

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