Ollier disease in a 6-year-old child

Conor Gouk,1 Luca Daniele,1 Craig Buchan2

1Department of Orthopaedics, Gold Coast University Hospital, Gold Coast, Queensland, Australia
2Department of Radiology, Gold Coast University Hospital, Gold Coast, Queensland, Australia

Correspondence to
Dr Conor Gouk, c.j.gouk.06@aberdeen.ac.uk

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DESCRIPTION

A 6-year-old boy presented to the orthopaedic clinic, referred from his general practitioner after his mother noted an apparent shortening of the left leg, in toeing of the left foot and a waddling gait. No sinister symptoms were described. On examination there was a half-centimetre shortening in the femoral component of the left leg.

An X-ray of the pelvis and left femur revealed multiple lucent lesions in the left hemipelvis and the femoral metaphysis and diaphysis with a predilection for the lateral bone (figures 1 and 2). The left hemipelvis lesion demonstrated the characteristics of large chondroid lesions with thinning of the lateral cortex. The left femur contained multiple lucent lesions and a ‘celery stalk’ appearance of the lateral distal metaphysis, valgus deformity and thinning of the lesser trochanter cortex. A radiographic skeletal survey revealed further lesions of the proximal left tibia (figures 3 and 4), with an additional lucent lesion in the ipsilateral third metatarsal (figure 5).

An MRI of the pelvis and left leg confirmed lesions in the physis, epiphysis and metaphysis of the proximal femur, and diaphyseal lesions of the femur and tibia. No associated soft tissue mass.

These findings suggest multiple enchondromatosis, also known as Ollier disease.

Ollier disease is a rare condition, with a quoted incidence of 1 in 100 000.1 It is characterised by multiple enchondromas, often destructive. It is often complicated by deformity, limb shortening, pathological fracture and chondrosarcoma.2

Figure 1 Plain radiograph showing anteroposterior view of the pelvis.

Figure 2 Plain radiograph showing anteroposterior view of the left femur.
Learning points

▸ Ollier disease most commonly presents with shortening of the affected limb (asymmetric dwarfism).
▸ Skeletal survey is an important diagnostic tool, as by definition the condition is multiple in nature.
▸ There are complications associated with Ollier disease, most notably pathological fracture and chondrosarcoma.

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REFERENCES