Ollier disease in a 6-year-old child

Conor Gouk, Luca Daniele, Craig Buchan

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
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.

Acknowledgements
The authors would like to thank Dr Don Pitchford Orthopaedic and Radiology teams of Gold Coast University Hospital.

Competing interests
None declared.

Patient consent
Obtained.

Provenance and peer review
Not commissioned; externally peer reviewed.

REFERENCES
Copyright 2015 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit http://group.bmj.com/group/rights-licensing/permissions.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:
▸ Submit as many cases as you like
▸ Enjoy fast sympathetic peer review and rapid publication of accepted articles
▸ Access all the published articles
▸ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow