Meyer dysplasia: a diagnosis to consider

Ana Teresa Maria,¹ Raquel Firme,¹ Pedro Magro,² Sílvia Jorge¹

¹Department of Paediatrics, Hospital de Cascais, Cascais, Portugal

²Department of Orthopaedics, Hospital de Cascais, Cascais, Portugal

Correspondence to

Dr Ana Teresa Maria, anateresamaria@gmail.com

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DESCRIPTION

A 2-year-old boy with unremarkable medical history presented to the emergency room due to sudden onset of left hip pain and limping gait, without fever or trauma. On observation, he had no signs of inflammation and no limitation of joint mobilisation. Hip radiography revealed widening of the medial joint space and a smaller, irregular, ossification nucleus of the proximal left femur, with no condensation and no other epiphyseal changes (figure 1). Laboratory data showed no elevated inflammatory parameters. The patient was submitted to hip ultrasonography, which excluded effusion; and CT scan, which confirmed the X-ray findings. The diagnosis of Meyer dysplasia (MD) was then suggested and symptoms resolved within a few days with minimal analgesia. At the age of 4, he remains asymptomatic with progressive radiological improvement at orthopaedic follow-up.

MD is a rare hip developmental disorder, characterised by delay and irregularity of ossification of the proximal epiphyseal nucleus of the femur.^{1 2}

The differential diagnosis consists mainly of Perthes disease (PD). Recent series suggest that up to 5% of patients initially diagnosed with PD have

MD.¹ In MD, there are multiple independent ossification foci, which gradually coalesce to form a single nucleus. Unlike PD, there are no aspects of epiphyseal condensation, fragmentation, subchondral fractures or collapse. Symptoms, when present, are mild and transient.³ The diagnosis can be achieved by plain radiography, not requiring additional investigations. Evolution is favourable, with the epiphysis reaching normal shape and size.^{2 3} Treatment is not necessary and prognosis is good.^{1 3} Clinical and radiographic surveillance is recommended to document resolution.^{1 3}

Learning points

- ▶ Meyer dysplasia (MD) is a rare but benign condition. It should not be confused with Perthes disease (PD), which involves severe changes in hip development.
- ▶ A wider knowledge of clinicoradiological features of MD is important for its prompt recognition and to prevent children from undergoing unnecessary diagnostic and therapeutic procedures. In this case, ultrasonography and CT could have been avoided.

Competing interests None declared.

Patient consent Obtained.

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Figure 1 Radiological appearance in Meyer dysplasia, with irregularity of the proximal epiphyseal nucleus of the femur and absence of consolidation, fragmentation and epiphyseal collapse.

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