

(Refer to page 115)

ANSWER: LEGG-CALVÉ-PERTHES DISEASE (LCPD) RIGHT SIDE

LCPD is a self-limiting condition in children caused by interruption of blood supply to the capital femoral epiphysis (CFE) leading to necrosis (seen as increased density of CFE in Figure 1) and impaired endochondral ossification.¹⁻³

At least two episodes of ischaemia are needed to cause LCPD and a number of factors including micro-trauma, hypercoagulability, environmental, prenatal and genetic factors have been implicated in its causation.³

It commonly occurs in children aged 3 to 7 with a propensity towards boys. Patients typically present with a painful limp. Examination would reveal a limping gait with limited internal rotation and abduction of the hip joint.¹⁻³

The goals of treating LCPD are to improve mobility, reduce stress on the joint to prevent deformity of femoral head and joint incongruity. Containment of the femoral head is the mainstay of treatment which can be done by conservative treatment and / or surgery. Surgery may be performed on the femoral, acetabular or at both sites.¹⁻³

Prognosis in LCPD is generally good, and is determined by age of onset, movement limitation, visible involvement of the femoral head radiologically, and "head-at-risk signs" which includes subluxation of the femoral head, lateral epiphyseal calcification and metaphyseal cyst formation. Some patients develop osteoarthritis of the hip after 50 years of age.¹⁻³

REFERENCES

- 1: Forest III JA, Jackson G, Benjamin MM, Long-Nelitz M, Lippacher S, Krauspe R, Reichel H. [Perthes disease: current principles of diagnosis and treatment](#). *Deutsches Arzteblatt International* 2009;106:517–23. DOI:10.3238/arztebl.2009.0517. [Accessed on 20 September 2020].
- 2: Joseph B. [Management of Perthes' disease](#). *Indian Journal of Orthopaedics* 2015;49:10–6. DOI:10.4103/0019-5413.143906. [Accessed on 20 September 2020].
- 3: Leroux J, Abu Amara S, Lechevallier J. [Legg-Calvé-Perthes disease](#). *Orthopaedics & Traumatology: Surgery & Research* 2018;104:S107-S112. DOI:10.1016/j.ostr.2017.04.012. [Accessed on 20 September 2020].