Malaysian Orthopaedic Journal 2023 Vol 16, Supplement A

Ollier disease : Unilateral lower limb shortening

[1]Shashank R; [2]Firdaus O; [2] Zulkiflee O
[1]Department of Orthopedics, Hospital Pulau Pinang

INTRODUCTION:

Ollier disease is a rare condition characterized by multiple enchondroma asymmetrically distributed over the appendicular skeleton

REPORT:

A 5 year old girl was brought to our attention for a short limb gait noted by her parents over the past year. She was overall asymptomatic, and her history did not suggest any trauma, infection, metabolic disease or skeletal dysplasia. Her limb discrepancy was 4 cm isolated at the femur. There was no palpable masses

Radiographs of her lower limb profile revealed a shorter femur with discrete enchondroma lesions over the proximal and distal metaphysis. Her projected discrepancy at skeletal maturity was estimated using the multiplier method with the assumption that the proportion of the discrepancy remains the same.

Her staged surgical treatment of limb lengthening with curettage of the lesions is to begin at age 7

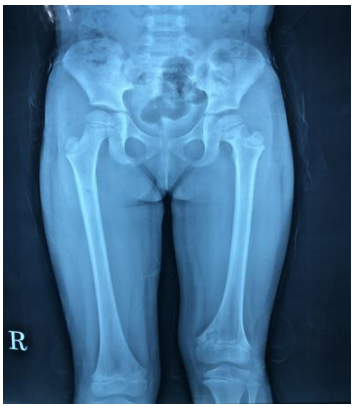

Figure 1: limb discrepancy

Patients present with bone shortening when the physis adjacent to the enchondroma is abnormal or the epiphyseal cartilage is tethered by a thick periosteal sleeve that forms in reaction to a nearby enchondromatous lesion

The key distinguishing factor between Ollier disease and multiple hereditary exostosis (MHE) is the location of the lesions

In Ollier disease the enchondromas typically originate from the intramedullary canal but in MHE, osteochondromas are found at the cortices

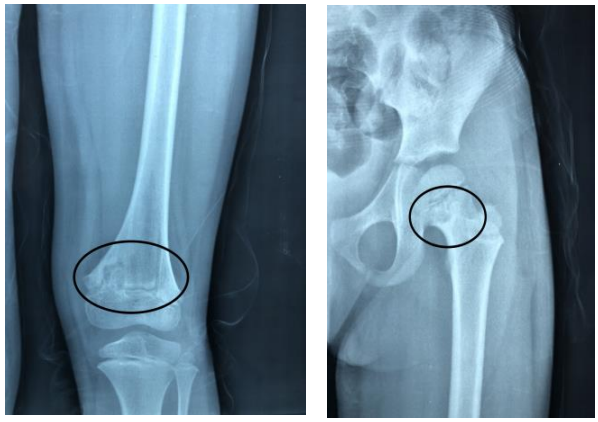

Figure 2 : multiple enchondroma

CONCLUSION:

Ollier disease may not become apparent until early childhood when symptoms such as deformities or limb length discrepancies become more apparent.

REFERENCES:

1.Wang H: Bone lengthening for children with limb shortening due to Ollier's disease. Chin J Orthop Surg. 5:471-476.2018

2. Madan SS, Robinson K, Kasliwal PD, Bell MJ, Saleh M and Fernandes JA: Limb reconstruction in Ollier's disease. Strategies Trauma Limb Reconstruction. 10:49-54