Focal Fibrocartilaginous Dysplasia (FFCD)

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Clinical Image

Although many skeletal disorders may result in bilateral angular deformity of the lower extremity, only a few cause unilateral deformity. Most children who have bilateral angular deformities of the lower extremities also have benign physiological conditions in which the deformities correct with growth [1]. This report is a description our case who had an angular deformity of the distal end of the femur associated with an unusual fibrous tether that resulted in a valgus deformity of the distal end of the femur. A two and one half year old boy was seen for an obvious deformity (genu valgum) of the right lower limb, which had first been noticed by the mother. The deformity was painless, and there was no history of injury or infection. Roentgenograms had shown an unusual ill defined linear defect in the femoral metaphysis and a valgus deformity of the distal end of the femur (Figure 1). The child’s condition was followed regularly. The shortening of the femur increased and there was a slight increase in the valgus angulation of the leg. Surgical correction was performed with external opening osteotomy using hydroxyapatite bone substitute (Figure 2). FFCD is a dysplastic disorder of long bones that was first described by Bell et al in 1985 [2]. It is a rare cause of unilateral bone deformities in children which usually affects the medial aspect of the tibial metaphysis. The differential diagnosis can be a neurofibromatosis, Ollier disease and growth disturbance resulting from physeal
injury or infection. There is a spectrum of histopathologic features that ranges from purely fibrous lesions to those containing hyaline and fibrocartilage. The fibrous band can be break-up as a result of growth and correction of the deformity is spontaneously [3]. Surgery is required when the deformation is greater than 20°.

References