Isolated congenital pseudarthrosis of the fibula

Meena Moorthy · Johnny U. V. Monu

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An otherwise healthy 1-year-old boy with normal developmental milestones was seen for external rotation of the right foot. On examination the right foot was slightly abducted and externally rotated; initial concern was for calcaneal valgus deformity. Plain radiographs (Fig. 1) showed a pseudarthrosis at the distal fibula. The tibia was normal. In view of a strong family history of neurofibromatosis, a diagnosis of isolated congenital pseudarthrosis of the fibula was made.

Isolated congenital pseudarthrosis of the fibula is uncommon and has varying degrees of severity as described by Dooley et al [1]. It can be seen in patients with neurofibromatosis type 1 (NF1), as was likely with this child who had a the strong family history. Another possible diagnosis was fibrous dysplasia. Pseudarthrosis in NF1 is most commonly present in the tibia and radius and infrequently affects the fibula alone. The lesion can cause severe bowing deformity, and surgical intervention is often necessary for management [2]. Plain radiographs are often diagnostic.

Fig. 1 Lateral (a) and frontal (b) radiographs of the leg

M. Moorthy · J. U. V. Monu
Department of Imaging Sciences,
University of Rochester Medical Center,
Rochester, NY, USA

J. U. V. Monu (✉)
University of Rochester Medical Center,
601 Elmwood Ave., Box 648, Rochester, NY 14642, USA
e-mail: Johnny_monu@urmc.rochester.edu

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