

Surgical Treatment of a Rare “Reverse” Madelung Deformity in 11 Years Female Patient

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Abstract

Madelung deformity is an abnormality of the distal part of the forearm due to a growth arrest in the distal radial physis creating an increase of the radial tilt angle associated with a dorsal subluxation of the distal ulna in most cases. It is a rare condition which represents only 1.7% of hand deformities being characterized by the presence of an abnormal structure, Vickers ligament, that tethers the distal radius to the lunate bone. Although it is believed to be a congenital disorder, the symptoms are absent till late childhood. We present a case of a 11 years old girl patient, who came to our clinic for deformity of both forearms, which consisted of an anteriorly curved radius, volar prominence of the distal ulna, partial limitation of supination and pain in the last 6 months, with and insidious onset and aggravated lately. The mother of the patient, at the age of 13, was diagnosed with the same deformity which was surgically treated at that time. Furthermore, the patient has an older sister with no deformity of the forearms. X-rays revealed an increased radial tilt and anterior luxation of the distal ulna. Considering the deformity and the presence of pain we decided to excise the Vickers ligament and make an opening and derotation wedge osteotomy of the distal radius.

Key words: Madelung deformity, Vickers ligament, radius osteotomy