

A rare, late presentation of pseudo-Madelung deformity

Ullas Jayaraju¹

Jennifer Waterman¹

Angus D Maclean¹

Author details can be found at the end of this article

Correspondence to:

Ullas Jayaraju;

Ullas.Jayaraju@nhs.net

A 56-year-old man presented to the clinic with increasing pain along the ulnar aspect of his forearm, which worsened during prolonged periods of mountain biking, with no pain at rest. Examination revealed a clearly shortened left forearm compared to the right (**Figure 1**) as well as reduced supination and pronation. He had a full range of flexion and extension at the wrist.



Figure 1. Antero-posterior radiograph of the left forearm, demonstrating the shortened ulna and radius with ulnar tilt.

This pseudo-Madelung deformity appeared to be secondary to a traumatic injury, when he had fallen from a tree at 9 years of age. The subsequent left forearm fracture had been treated conservatively with a plaster of Paris cast.

This late presentation of pseudo-Madelung's deformity is rarely described (Ray et al, 1996). Pseudo-Madelung's deformity demonstrates a negative ulnar variance and articulation of the ulna with the medial cortex of the metaphyseal-diaphyseal junction of the overarching radius (Ali et al, 2015). There is no dorsal subluxation of the distal ulna and no reports of an additional aberrant Vicker's ligament. Surgical intervention would involve a radial closing wedge osteotomy: shortening the radius and reducing the ulnar tilt (Peymani et al, 2019). It is important to be aware of this as a cause of deformity and pain at the wrist so that such a diagnosis can be managed conservatively or with radial osteotomy if symptoms dictate. If recognised before skeletal maturity, radial epiphysiodesis can be implemented.

Author details

¹Department of Orthopaedic Surgery, Prince Charles Hospital, Merthyr Tydfil, UK

References

Ali S, Kaplan S, Kaufman T et al. Madelung deformity and Madelung-type deformities: a review of the clinical and radiological characteristics. *Pediatr Radiol*. 2015;45(12):1856–1863. <https://doi.org/10.1007/s00247-015-3390-0>

How to cite this article:

Jayaraju U, Waterman J, Maclean AD. A rare, late presentation of pseudo-Madelung deformity. *Br J Hosp Med*. 2021. <https://doi.org/10.12968/hmed.2021.0037>

Peymani A, Johnson AR, Dowlatshahi AS et al. Surgical management of Madelung Deformity: a systematic review. *Hand (New York NY)*. 2019;14(6):725–734. <https://doi.org/10.1177/1558944718793179>

Ray TD, Tessler RH, Dell PC. Traumatic ulnar physeal arrest after distal forearm fractures in children. *J Pediatric Ortho*. 1996;16(2):195–200