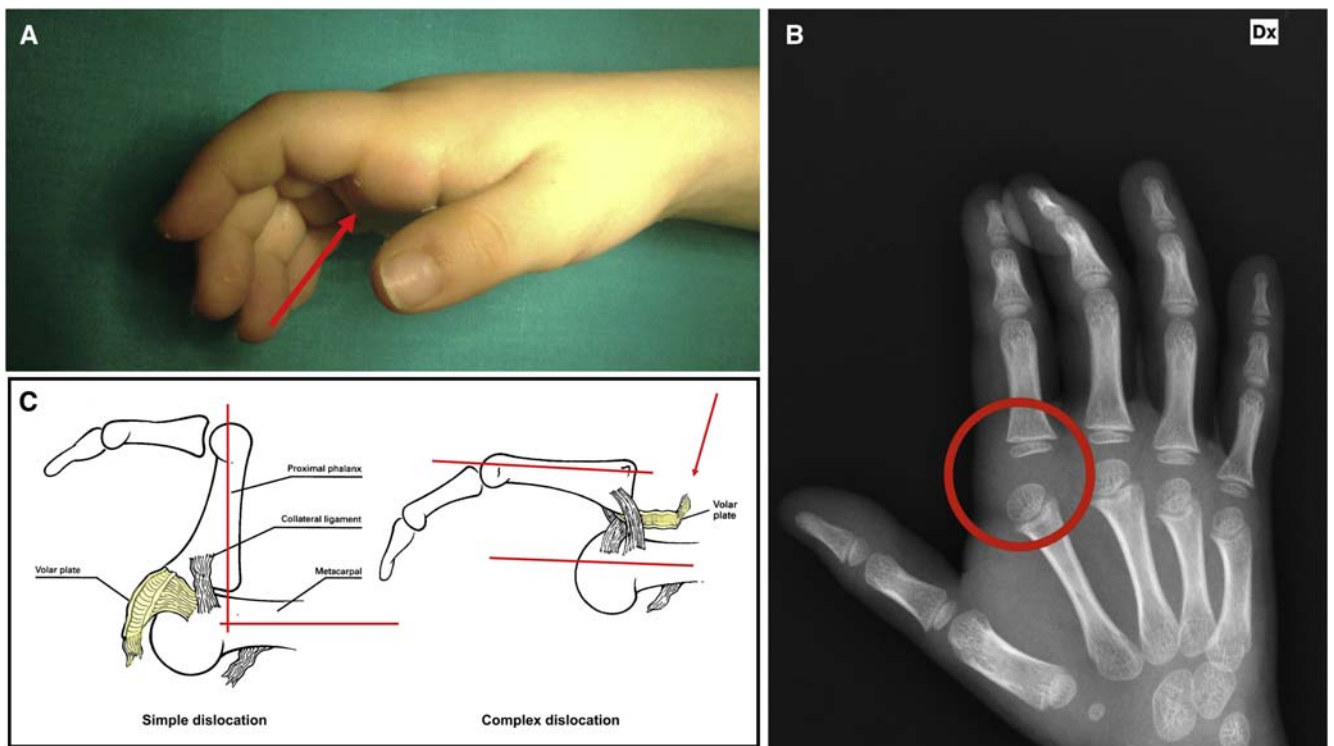


A 5-year-old girl was admitted to the emergency department with her right second finger swollen and painful. The proximal phalanx was dorsal to the metacarpal bone (Figure, A). A history of a forceful hyperextension of the digit owing to a fall on an outstretched hand was obtained. The radiograph showed a widened joint space between the metacarpal head and the second finger's first phalanx (Figure, B). A complex dorsal metacarpophalangeal dislocation of the index finger was diagnosed. The patient underwent a volar surgical approach on the first day of injury, achieving full recovery in 4 weeks.

Metacarpophalangeal dislocation is a rare entity that should be suspected in the presence of a history of digit traumatic hyperextension and typical bayonet position. If the

dislocation is simple, proximal phalanx and metacarpal bone form an angle of nearly 90°, with the damaged plate located volar to the metacarpophalangeal head.<sup>1</sup> Complex dislocation is characterized by the “bayonet position,” with the proximal phalanx displaced dorsally to the metacarpal bone and the volar plate between the 2 bone segments (Figure, C).<sup>2</sup> Physical examination does not allow this distinction, owing to the edema and the hematoma of the finger. To discriminate a simple dislocation from a complex one, a radiograph should be routinely performed to also rule out more common complications, such as fractures or epiphyseal detachments of the base of the first phalanx. Moreover, physicians should be aware that the radiological sign represented by the dislocation of sesamoid bone,



**Figure.** **A**, Complex dislocation, characterized by the bayonet position of the second finger. **B**, Anteroposterior radiograph of the right hand injured. **C**, Note the angle between the proximal phalanx and the metacarpal bone: perpendicular in the simple form, parallel in the complex form. In the latter, the *arrow* points to the palmar plate, which is erroneously displaced between the 2 bone segments. Adapted from Gerrand CH, Jarrett P. A dislocated finger. *Postgrad Med J* 1998;74:249-51, with editor permission for publication.

pathognomonic of dislocation in adults, is not visible in children.

Tractions should be avoided in the pediatric patient because ligament laxity can lead to the volar plate's displacement, converting a simple dislocation into a complex one.<sup>3,4</sup> Furthermore, it could worsen the lesion's soft tissues' damage and strengthen the noose around the second metacarpophalangeal head. Therefore, even in a simple dislocation, surgery would be the best choice to be performed on the first day of the trauma.<sup>5</sup> The lesion's clinical aspects do not correlate with the seriousness of the damage and the possible related severe implications. This lesion should be recognized and treated promptly to avoid long-term complications such as joint stiffness, osteonecrosis of the metacarpal head, degenerative arthritis, and the physis' premature closure leading to the growth arrest. ■

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