The floating phalanx of the left-hand second finger: About a case

Mamadou Moustapha Diallo, Alpha Mamadou Felah Diallo, Mohamed Lamine Bah, Tafsir Camara, Mohamed Sidibé, Ibrahima Gallé Diallo, Nouhou Mangué Camara and Leopold Lamah

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Abstract
We report a case of simultaneous bipolar dorsal dislocation of the interphalangeal joints of the second left finger following an occupational accident. The treatment was Orthopaedic by syndactylization after reduction by external manoeuvre for three weeks. At the last follow-up, joint mobility was identical to normal.

Keywords: Dislocation; Interphalangeal joints

Introduction
Pure floating phalanges described in the literature are very rare [1]. We report an exceptional lesion association: a simultaneous dislocation of the proximal interphalangeal (IPP) and distal (IPD) of the second finger. Although the reduction is most often a surgical procedure, Orthopaedic treatment should always be attempted first. Through this study, we will discuss the diagnostic, anatomical and incredibly therapeutic aspects of this lesson.

Clinical Case
This is a 48-year-old patient, a carpenter, left-handed, with no pathological history, received three hours after a trauma supported by hyperextension of the end of the second finger left during a fall from the roof of a house, causing deformation of the index finger with shortening (Fig. 1-2). The AP and lateral X-ray showed a dorsal dislocation of the proximal and distal interphalangeal of the second finger without associated bone lesion, resulting in a floating phalanx (Fig. 3-4).

Fig 1-2: Deformation and shortening of the second finger: bipolar dislocation of the second phalanx

We proceeded urgently; under the digital block of the base of the index finger, a closed reduction was performed: gentle traction with slight flexion of the interphalangeal joints. The testing of active and passive joint mobility post-reduction of the PIP and the IPD in search of instability in the frontal plane was standard, particularly the full extension of the second finger. Follow-up radiographs confirmed the reduction and the absence of associated fracture (Fig. 5-6). The patient had immobilization in extension with syndactylization of the second and third fingers for three weeks. Functional rehabilitation was started in the fourth week.
IP, with no residual. As a he-ers and thus facilitate on of the hyperextension of the finger causing a rupture of the distal phalanx. In rare cases, the volar plate ruptures at the level of proximal to the DIP and distal to the PIP, sometimes responsible for bone avulsion at the base of the second finger in the axis.

The mechanism of occurrence corresponds to a force applied to the end of the affected finger, resulting in hyperextension. The treatment is most often Orthopaedic and consists of reducing the phalanx under a digital Anaesthetic block by exerting dorsal pressure on its dislocated base while pulling the finger in the axis.

In the case reported, it is a particularly resistant proximal insertion which opposes ligament of apparel extension.

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It is advisable to start with reducing the IPD to relax the tendon of the deep flexor of the fingers and thus facilitate the reduction of the PPI. It is sometimes necessary to perform forced hyperextension of the PIP to open up the palmar plate and thus obtain a correct reduction. These external manoeuvres must be performed gently not to aggravate a possible ligament injury. Joint stability must be checked, both active and passive, to detect associated ligament or tendon damage.

In the case of an irreducible dislocation, the extrication of the volar plate, the flexor tendon or an interposed osteochondral fragment must be carried out. If functional mobility testing suggests a lesion of the deep flexor tendon, it must be sutured or reinserted.

The immobilization of the IPP and the IPD in straightness by a splint for three weeks allows regression of the inflammatory phenomena in order to be able to start then an early functional rehabilitation aimed at combating the formidable complications that are the stiffness. And residual pain.

However, immobilization in the wrong position leads to significant stiffness; some authors have even proposed making temporary pinouts in extreme cases.

Discussion
Bipolar interphalangeal dislocations require high-energy trauma, strong bone, and supportive posture. The anatomical and physiological particularities of this joint explain its rarity. Indeed, the stability of the interphalangeal joint is ensured by the articular capsule, reinforced by the external and internal collateral ligaments, the palmar plate, the flexor sheath, the lateral bands, and the triangular ligament of apparel extension. La plaque palmar has a particularly resistant proximal insertion which opposes hyperextension.

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Conclusion
Bipolar dislocations of the interphalangeal joints of the second finger remain rare. Reduction by external manoeuvres is usually sufficient in simple cases. On the other hand, it is necessary always to test the joints after any reduction. Thus, an early reduction followed by adequate immobilization and sufficient rehabilitation makes obtaining an excellent functional result possible.

Conflict of Interest
Not available

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References

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