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Title

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Journal

Journal of Education and Teaching in Emergency Medicine, 1(2)

Authors

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Publication Date

2016

DOI

10.5070/M512032475

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Peer reviewed

Open Dislocation of Fifth Digit

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Submitted: June 23, 2016; Accepted: August 2, 2016; Electronically Published: September 13, 2016; <https://doi.org/10.21980/J8J01X>

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History of present illness: A 17-year-old female presented with a chief complaint of right fifth finger pain. The patient reported that she was playing volleyball when she blocked an opponent's shot and sustained an injury to her right fifth finger.

Significant findings: Physical exam revealed an open dislocation of the proximal interphalangeal joint (PIP) of the right fifth digit. X-ray confirmed dislocation and revealed no fractures. The patient received a tetanus booster, Cefazolin, and the dislocation was then washed out and reduced. Multiple reduction attempts were made and were only successful once the metacarpophalangeal joints were held in 90-degree flexion, which relaxed the lateral bands and enabled the finger to be reduced.

Discussion: Proximal interphalangeal joint dislocations result in more complications than those of distal interphalangeal joints (DIP).¹ Dorsal dislocations of the PIP are more common than volar dislocations and usually cause injury to the volar plate and the collateral ligaments.² Dislocations are typically reduced with hyper-extension of the middle phalanx followed by longitudinal traction of the distal portion of the finger, and then gentle flexion or palmar force.^{1,2} The finger is then splinted in 20-30 degrees of flexion. Open dislocations and fracture dislocations should be evaluated for hand surgery.¹ If left untreated or incompletely reduced, dorsal dislocations of the PIP may lead to swan neck deformities.²

Topics: Orthopedics, hand injuries, open dislocation, DIP, PIP, swan neck deformity, reduction.

References:

1. Nelson SW, Gibbs MA. Hand and wrist injuries. In: Adams JG, Barton ED, Collings JL, DeBlieux PM, Gisondi MA, Nadel ES, eds. *Emergency Medicine: Clinical Essentials*. 2nd ed. Philadelphia, PA: Elsevier; 2013:785.
2. Bloomberg J. Phalanx dislocations. OrthoBullets. <https://www.orthobullets.com/hand/6038/phalanx-dislocations>. Updated February 5, 2016. Accessed July 11, 2016.