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Title

Pediatric Proximal Phalanx Fractures: Outcome of Treatment or Salter Harris Type 2 Injuries

Purpose

Salter-Harris type 2 (SH2) fracture of the proximal phalanx is the most common phalangeal fracture in the growing hand, and treatment ranges from immobilization and splinting of milder injuries to surgery for irreducible fractures. This study evaluates the outcome of SH2 fractures treated by early mobilization, splint immobilization, and cast immobilization.

Methods

Retrospective chart review from 2014-2016, identified 88 patients (90 digits) with proximal phalangeal base SH2 fractures treated at our institution with a minimum of one month follow up. Two patients who underwent surgery were excluded from our analysis. Clinical data and radiological outcomes were charted and analyzed.

Results

Five patients were treated with buddy taping, 30 by splinting, and 52 by casting. The average time to radiological union is 4.5 weeks. The average follow up is 6.6 weeks. A total of 22 patients received manipulation and reduction of the fracture. Only one finger showed secondary displacement on follow up XR done at four weeks post injury. Splint immobilization was as good as cast in maintenance of fracture reduction, and there was no statistically significant difference in outcomes between the groups.

Conclusion

Splint immobilization seemed to provide comparable clinical and radiological outcome, without cast related discomfort or complications.