Isolated 5th Metatarsal Fractures: A Spectrum of Patterns with Similar Clinical and Radiographic Outcomes Regardless of Management

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INTRODUCTION: Several types of 5th metatarsal (MT) fractures exist and are treated with various methods of immobilization, weight bearing restrictions, and occasionally operative procedures. This study evaluated the differences in clinical and radiographic outcomes among pseudo-Jones fractures (Zones 1 and 2), true Jones fractures (Zone 3), and 5th metatarsal shaft, neck, and head fractures.

METHODS: A retrospective review of a consecutive series of patients presenting to a single academic medical center with a 5th metatarsal fracture between 2012 and 2022 was conducted. Radiographs obtained at the initial presentation were reviewed, and fracture patterns were categorized as either Zone 1, Zone 2, Zone 3, shaft, neck, or head fractures.

RESULTS: In total, 1,314 patients with isolated 5th metatarsal fractures were treated (mean age 49.6 +/- 18.0 years). 1,217 fractures (92.5%) were initially treated nonoperatively, and 97 fractures (7.5%) were treated operatively. The overall time to clinical and radiographic healing for all 5th metatarsal fractures treated nonoperatively was 9.9 +/- 8.7 weeks and 17.9 +/- 15.6 weeks, respectively (p = 0.245, p = 0.088). There was no statistically significant difference in time to clinical or radiographic union among the different fracture types (p = 0.496, p = 0.400). Likewise, there was no evidence of any difference in time to clinical or radiographic union for patients treated operatively (p = 0.502, p = 0.328).

DISCUSSION AND CONCLUSION: This demonstrates all isolated 5th metatarsal fractures can be successfully treated nonoperatively and with similar times to clinical and radiographic healing.



