

Connor Zale MD¹, Melanie Cusi BS² and Paul Ryan MD¹

ABSTRACT TITLE: Traumatic Lesser Metatarsal Fractures in a Military Population

Introduction

Metatarsal fractures are a commonly encountered musculoskeletal condition. The recommended treatment is dependent upon the independent fracture pattern encountered. The purpose of this study is to observe outcomes for traumatic metatarsal fractures in a military population.

Methods

All lesser metatarsal fractures in adult patients 18 years and older were included. Patient demographics treatment type, associated injuries were recorded from the electronic medical record. Rate of return to active duty, requirement for additional surgeries, complications, ability to run the 2-mile physical fitness test and presence of permanent profile were reviewed.

Results

Thirty-eight fractures involving active-duty service members were included. The mean age was 27.2 ± 7.8 (19-48). Twenty-eight fractures were initially treated non-operatively. One non-operative case was converted to operative management. One operative fracture underwent revision surgery. 79% were able to return to running. 8 patients with metatarsal fractures were medically discharged from military duty. Five of the patients discharged were treated operatively.

Conclusion

Overall rate of returning to running was 89% among non-operative patients and 50% for operatively treated patients. Medical discharge rate was 50% for operative cases and 10.7% for non-operative cases. Occupational outcomes presented in this study may help surgeons and patients in their shared decision-making process.

Keywords: Metatarsal, Military, Lesser Metatarsal, Return to Duty, Return to Run