

2019 NEHS Annual Meeting Abstract Submission

ABSTRACT TITLE *	Improved Short-Term Outcomes of Operative Versus Conservative Management of Distal Radius Fractures in the Elderly
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Name of who will present abstract at NEHS meeting on December 6, 2019 Please note that the same person cannot present more than one abstract at the meeting. *	Garrick Gu
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ABSTRACT – should include background information and a description of methods, programs, or practices. *

Introduction

Distal radius fractures are frequent injuries of the upper extremity in the geriatric population and can cause profound loss of function and greatly impact quality of life. Previous literature shows comparable long-term outcomes regardless of treatment modality. Our prospective study aims to demonstrate a safe and efficacious operative management of distal radius fractures that provides better short-term outcomes and return to function in the elderly.

Materials & Methods

From 2017 to 2019, patients age 65 and older with unilateral distal radius fractures without any concomitant polytrauma are included in this prospective study. Patients treated with conservative management with casting or surgical intervention with open reduction internal fixation with volar plating were evaluated at each follow up visit for treatment weeks 1, 3, 6, 12, and 26. At each treatment interval, QuickDASH, wrist range of motion, and pain were assessed to determine level of function and quality of life. Treatment outcomes are compared between the surgical and conservative groups using the t test.

Results

A total of 38 patients in the surgical group (average age 72.6) and 15 patients in the conservative group (average age 73.8) were evaluated. The conservative group reported more wrist pain than the surgical group during their treatment of casting at weeks 3 and 6 ($p < 0.05$). Both groups had similar wrist range of motion initially, however, starting week 12 the surgical group had notably better wrist extension at 58 degrees versus 32.5 degrees in the conservative group ($p = 0.006$), as well as wrist flexion at 58 degrees versus 27.5 degrees in the conservative group ($p = 0.002$). Supination, pronation, radial and ulnar deviation between the treatment groups remained similar. With QuickDASH scores comparable until week 3 of treatment, the surgical group showed better functional results as reflected by better QuickDASH scores than the conservative at week 6 (48.7 vs 55.9) and week 12 (35.8 vs 46.4).

Conclusions

Surgical intervention of distal radius fracture in the elderly is a safe and effective procedure. It provides better range of motion, as well as pain control and better quality of life in the short-term than conservative treatment. Surgery allows

for an earlier return of function. A thorough discussion of the surgical option is imperative to provide the best treatment for distal radius fracture patients over 65.
