

INTRODUCTION

Experiencing a fall and a subsequent distal radius fracture can have a major impact not only on patients' physical function, but also on their emotional state. The purpose of this project was to describe the prevalence of Fear of Falling (FoF) and Post Traumatic Stress Disorder (PTSD) following surgically managed distal radius fractures due to a fall.

MATERIALS & METHODS

Patients who underwent surgery for a distal radius fracture due to a fall were identified by a database query. Patients were divided into three groups based on time from surgery: 0-2 weeks (Acute), 3-6 months (Mid-Term), and 12-15 months (Long-Term). FoF was measured using the Falls Efficacy Scale-International (FES-I) questionnaire. PTSD was measured using the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders (DSM) Text Revision-5 (PCL-5) questionnaire. 239 patients who met inclusion criteria were consented via phone and completed the emailed surveys.

TABLES

Table 1 Patient characteristics and prevalence of fear of falling

	Acute (N = 30)	Mid-term (N = 40)	Long-term (N = 42)	p-Value	Post-hoc acute vs. long term
Age (median [IQR])	64.0 [56.2–68.0]	60.5 [54.0–68.0]	66.0 [57.0–69.0]	0.361	
Gender (N [%])				0.485	
Male	7 [23.3]	13 [32.5]	9 [21.4]		
Female	23 [76.7]	27 [67.5]	33 [78.6]		
FES-I score (median [IQR])	24.5 [20.0–29.5]	21.0 [16.8–28.2]	19.0 [18.0–21.0]	0.004	0.001
High concern for falling (% [N])	63.3% [19]	35.0% [14]	19.0% [8]	0.001	0.001

Abbreviations: FES-I, Falls Efficacy Scale-International; IQR, interquartile range.
 Note: Significant values are highlighted in bold.

Table 2 Patient characteristics and evaluation of posttraumatic stress

	Acute (N = 44)	Mid-term (N = 42)	Long-term (N = 41)	p-Value
Age (median [IQR])	64.0 [56.0–68.2]	61.5 [54.0–68.0]	66.0 [57.0–69.0]	0.575
Gender (N [%])				0.574
Male	10 [22.7]	13 [31.0]	9 [22.0]	
Female	34 [77.3]	29 [69.0]	32 [78.0]	
PCL-5 score (median [IQR])	2.00 [0.00–5.25]	3.00 [0.00–8.00]	3.00 [1.00–9.00]	0.464
Probable PTSD (% [N])	2.3% [1]	4.8% [2]	7.3% [3]	0.444

Abbreviations: IQR, interquartile range; PCL-5, PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders (DSM) Text Revision-5; PTSD, posttraumatic stress disorder.

RESULTS

FES-I scores were significantly higher in the Acute group versus the Long-Term group ($p=.04$). High concern for FoF was observed in 63% (19/30) of patients in the Acute group, in 35% (14/40) in the Mid-Term group ($p=.019$ versus Acute), and in 19% (8/42) in the Long-Term group ($p<.001$ versus Acute). Probable PTSD was observed in 2.3% (1/44) of patients in the Acute group, in 4.8% (2/42) in the Mid-Term group, and in 7.3% (3/41) in the Long-Term group.

DISCUSSION

Patients who undergo surgical fixation of a distal radius fracture due to a fall are subject to Fear of Falling and PTSD symptoms. In order to maximize postoperative outcomes, it is important for surgeons to be aware of these psychological effects and know how to screen for them.