

Sexual Function Is Impaired Following Common Orthopaedic Trauma

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Background/Purpose: Difficulty with sexual activity is an infrequently identified complaint in both men and women following fracture. While some research has been directed toward sexual activity following pelvic trauma, to our knowledge no study has investigated sexual dysfunction following non-pelvic orthopaedic trauma. The purpose of this study was to investigate the incidence and longitudinal improvement of patient-reported sexual dysfunction following 5 common orthopaedic traumatic conditions.

Methods: 1359 orthopaedic trauma patients were identified following 5 different orthopaedic fracture conditions. The functional status of patients with 4 acute traumatic conditions—proximal humerus fractures (n = 127), distal radius fractures (n = 391), tibial plateau fractures (n = 135), and ankle fractures (n = 434)—were followed with standard functional outcome measures. In addition, patients surgically treated for long bone fracture nonunion (n = 272) were analyzed. Data were collected at 3 distinct time points after treatment: 3, 6, and 12 months posttreatment. Patient-reported sexual dysfunction scores, acquired from validated functional outcome surveys, were compared to overall functional outcome scores and demographic information for both men and women. Subgroup analysis was analyzed for age, body mass index (BMI), marital status, and mechanism of injury.

Results:

Percentage of Postoperative Sexual Dysfunction at Standard Follow-up Intervals				
	Initial/Baseline	3 months	6 months	12 months
Proximal humerus fracture	Not recorded	30%	15%	15%
Distal radius fracture	6%	29%	17%	13%
Tibial plateau fracture	2%	43%	13%	9%
Ankle fracture	6%	11%	5%	4%
Long bone nonunion	42%	26%	17%	14%

All acute and chronic fracture conditions demonstrated significant correlation between patient-reported sexual dysfunction and their related overall DASH (Disabilities of the Arm, Shoulder and Hand) or SMFA (Short Musculoskeletal Function Assessment) functional indexes. Women reported a significantly higher degree of sexual dysfunction than men at 3-month ($P = 0.02$) and 6-month follow-up ($P = 0.01$). Women reported a borderline significant higher degree of dysfunction at 12 months ($P = 0.05$). However, women reported equivalent or better overall functional status than men at all intervals. Subgroup analysis did not show a significant effect.

Conclusion: In the first 3 months following treatment of 4 acute and 1 chronic orthopaedic trauma condition, a considerable number of patients experience sexual dysfunction. By 6

months, greater than 80% of both sexes return to baseline sexual activity levels. Women have a higher incidence of postoperative sexual dysfunction than men. While sexual dysfunction is highly correlated to functionality, functional status alone does not account for the gender disparity in postoperative sexual dysfunction. The results of this study should allow orthopaedic trauma surgeons to counsel patients regarding expectations of sexual function following traumatic orthopaedic conditions.

- The FDA has not cleared this drug and/or medical device for the use described in this presentation (i.e., the drug or medical device is being discussed for an “off label” use). For full information, refer to page 600.