

Self-Reported Feelings of Disability Following Lower-Extremity Orthopaedic Trauma

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Purpose: Nearly 20% of Americans consider themselves disabled. A common cause of disability is unexpected orthopaedic trauma. The purpose of this current study, assessing common lower-extremity trauma (tibial plateau and ankle fractures), is threefold: (1) to assess the prevalence of self-reported feelings of disability following these injuries; (2) to determine if self-reported feelings of disability impact functional outcomes, following these injuries; and (3) to understand if patient demographics or socioeconomics are associated with self-reported feelings of disability, following these injuries.

Methods: The functional status of patients with tibial plateau fractures and ankle fractures were prospectively assessed at baseline, 3, 6, and 12 months posttreatment. Patient-reported feelings of disability, acquired from validated functional outcome surveys, were compared with overall patient-reported functional outcome and emotional status at each follow-up visit. Patients who felt disabled before a fracture of the lower extremity were excluded from this study. Analysis was conducted, at short-term (3-month) and long-term (12-month) follow-up, to assess the association between feelings of disability and the patient demographics of age and gender. Independent t-tests were used for dichotomous variables. χ^2 analysis was used to assess differences between categorical variables. Spearman's correlation was performed to assess if a correlation existed between feelings of disability and functional outcomes.

Results: A total of 710 patients were included in our analysis. 435 patients sustained ankle fractures and 275 patients sustained tibial plateau fractures. At short-term follow-up (3 months), a strong positive correlation existed between self-reported feelings of disability and worse functional outcomes ($r_s = .744$, $P < 0.001$). At long-term follow-up (12 months), a strong positive correlation existed between self-reported feelings of disability and worse functional outcomes ($r_s = .741$, $P < 0.001$). Self-reported feelings of disability were associated with increased age at both short-term ($P = 0.015$) and long-term ($P = 0.003$) follow-up. Self-reported feelings of disability declined at each follow-up visit, from 48.1% at short-term follow-up to 22.1% at long-term follow-up.

Conclusion: Self-reported feelings of disability, following lower-extremity trauma, had strong positive correlations with worse outcomes, at both short-term and long-term follow-up. At long-term follow-up, self-reported feelings of disability significantly decreased. Patients who felt disabled were of older age. Orthopaedic trauma surgeons should be aware of the percentage of patients who feel disabled following lower-extremity fractures, and know that this is associated with suboptimal outcomes.