Patient Self-Assessment of Tibial Plateau Fractures in 40 Older Adults

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ABSTRACT

This retrospective study examined the outcome of 40 patients 50 or more years of age treated between September 1988 and September 1993 for tibial plateau fractures. Our analysis was based on a review of the medical records of all patients as well a patient self-assessment questionnaire.

The 22 women and 18 men studied had a mean age of 60 (range, 50 to 76 years) at the time of injury. A satisfactory overall outcome (based on patients' self-assessment) was observed in only 14 (35%) of the 40 cases. Unsatisfactory outcomes were observed in 23 (72%) of 32 cases treated operatively and 3 (38%) of 8 cases treated nonoperatively. No significant difference in outcome was observed between the 27 patients with AO type B fractures and the 13 patients with AO type C fractures. Similarly, no significant difference in outcome was observed in patients with fractures involving the lateral plateau only, those with fractures involving the medial plateau only, and those with bicondylar fractures. There was no significant relationship between the adequacy of fracture reduction and overall clinical outcome, although a trend of more favorable outcomes was noted in patients with excellent or satisfactory reductions. The results suggest that patients of 50 or more years of age have a high rate of unsatisfactory clinical outcomes regardless of how their tibial plateau fractures are treated.

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A tibial plateau fracture is a difficult management problem for the orthopedic surgeon. Although much has been written about these fractures in the general population, little attention has been devoted to the treatment and outcomes of these injuries in older adults. Older patients may present special problems because of declining bone stock, preexisting degenerative conditions of the knee, and possible coexisting medical problems.

The purpose of the present study was to document clinical outcomes (based on patients' assessment) of treatment of older patients who had sustained a tibial plateau fracture. Clinical outcomes were defined in terms of pain, function, complications, and the need for later reconstructive operative procedures.

MATERIALS AND METHODS

We analyzed a consecutive series of 57 tibial plateau fractures in 57 patients, aged 50 and over, who were treated at our institution between September 1988 and September 1993. Patients were excluded if they did not receive their definitive treatment at our institution, or had never returned for follow-up with the treating physician. Patients were also excluded if they had died without adequate clinical follow-up or had a comorbid condition that would confound assessment of their clinical outcome. Seven patients were excluded for one or more of these reasons; of the remaining 50 patients, 10 were lost to follow-up. Thus, 40 (80%) of the 50 eligible older patients with tibial plateau fractures were studied.

The medical records of all 40 patients were reviewed for demographic data, information pertaining to their injury, any complications, and any operative procedures required in the postinjury period. The office records of treating physicians were reviewed for information about treatment outcome.

The 22 women and 18 men had an average age at the time of injury of 60 years (range, 50 to 76 years). The mechanism of injury was a motor vehicle accident in 16 cases; fall in 14; auto-pedestrian