Is Arthroscopy For Treatment Of Tibial Plateau Fractures Necessary?

Oleg Bondarev, Alexandre Sitnik

BELARUS REPUBLIC SCIENTIFIC AND PRACTICAL CENTRE OF TRAUMATOLOGY AND ORTHOPAEDICS, Minsk, Belarus

keywords:Tibial Plateau, Fractures, Arthroscopy

Introduction: The aim of the present randomized clinical study was to compare the outcomes of two methods that were used for the treatment of lateral tibial plateau fractures.

Objectives: We traced follow-up results in patients, who had undergone operative treatment of tibial plateau fractures (Shatzker II type) between 2008 and 2010. Patients were divided into two groups: the first one (20 patients) included subjects, treated by minimal invasive percutaneous osteosynthesis; the second group (20 persons) consisted of patients, who underwent minimal invasive percutaneous osteosynthesis with arthroscopy.

Methods: All patients had an anatomical reduction of the articular surface and the same postoperative management. The outcome was measured on the basis of the Lysholm-like score. The final evaluation was based on the results of special methods – rheovasography and triplex vessels scanning. 20 patients from the 1-st group, and 20 – from the second, were examined by these methods in 12 days, 10 weeks, 6 months, and 12 and more months after operation.

Results: The comparative analysis in 2 groups showed, that by 12 months after operation, indices of volume blood flow on the operated extremity were, on the average, 8% higher (6% of the normal indices) in patients of the 2-st group (p>0.05). The functional follow-up showed same results in both groups.

Conclusions: we found no statistically significant differences in treatment outcomes of patients with tibial plateau fractures (Shatzker II type) who were treated with arthroscopy and without.