

Surgical Approach in Difficult Tibial Pilon Fractures

B. Puha¹, T. Petreuş², G. Berea¹, P.D. Sîrbu¹, G. Puha³, O. Alexa¹

¹Department of Orthopaedics and Traumatology, "St. Spiridon" Emergency Hospital,
"Gr.T. Popa" University of Medicine and Pharmacy Iaşi, Romania

²Department of Functional Sciences, "Gr.T. Popa" University of Medicine and Pharmacy Iaşi, Romania

³Department of Internal Medicine, "St. Spiridon" Emergency Hospital,
"Gr.T. Popa" University of Medicine and Pharmacy Iaşi, Romania

Abstract

Aim: The aim of the present study is to emphasize the optimal moment and approach for tibial pilon complex fractures and their complications.

Material and methods: We have investigated and treated 7 patients with complex fractures of the tibial pilon with tendencies to complications. According to AO classification, we have recorded 4 fractures type 43C2/AO, 2 fractures type 43C3/AO (with one open fracture type IIIA/Gustilo) and 1 fracture type 43B3/AO. According to soft tissue status, surgical treatment was performed by a one-step or two-step approach.

Results: All fractures healed after an interval of 13.6 weeks (range 8-28 weeks) with one delayed consolidation. The open fracture was complicated by posttraumatic arthrosis. No infections or implant failures were recorded. According to Ovadia score, objective and subjective evolution showed good results in 5 cases, one excellent result and one poor result.

Conclusions: Fracture type and the soft tissue status are crucial for the results of operated fractures. These arguments determine the application of one-step or two-step surgical procedure as well as optimal implant choice.

Key words: tibial pilon, a one-step/two-step surgical approach, arthroscopy, arthrodesis

Corresponding author: Paul Dan Sîrbu, MD

Department of Orthopaedics and Traumatology

"Gr. T. Popa" University of Medicine and Pharmacy Iaşi,

"St. Spiridon" Emergency Hospital Iaşi

16 Universitatii str., Iaşi, 700115, Romania

E-mail: pdsirbu@yahoo.com