**Professional article** 

UDC: 616.718.4-001.5-089.881 doi:10.5633/amm.2017.0305

## TREATMENT OF PERIPROSTHETIC FEMORAL FRACTURES WITH SELF-DYNAMISABLE INTERNAL FIXATOR

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Femoral fractures, after hip arthroplasty (Periprosthetic fractures), may impose an immense problem in the treatment and recovery of such patients. The treatment is very difficult because there is not any universal treatment method. In the present study, the patients with femoral fractures after total hip arthroplasty are presented, treated at the Clinic of Orthopedics of the Clinical Center Nis. Vancouver Classification System was used. The fractures have been fixed by cerclage wire, Muller's plates and Mitkovic's self-dynamizing Internal Fixator. The authors present 37 patients with femoral fractures after total hip arthroplasty. The average age is 67.3 years (26 women, 11 men).

Type A fracture was found in 8 patients, type B in 23 patients, and type C in 6 patients.

The femoral fracture occurred during the period from 2 months up to 4 years after the primary arthroplasty. Patients were followed 1 - 5 years after the surgery. All patients were mobile early and able to walk with crutches. The signs of fracture consolidation and healing appeared 3 - 5 months after the operation. In 5 cases there was no fracture consolidation up to 4 years. There were no mechanical complications. Periprosthetic femoral fractures are considered severe complications, particularly among the elderly. Mitkovic's dynamisable Internal Fixator represents an implant which enables fixation of all types of periprosthetic fractures, without impairing periosteal vascularisation, the fixation being at the same time less invasive compared to other implants. In addition, the implant enables dynamic fixation of a fracture, which reduces the risk of mechanical complications related to fixation. Acta Medica Medianae 2017;56(3):31-37.

Key words: Periprosthetic fractures, femoral bone, treatment