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Can acetabular fractures be successfully treated outside the trauma centre?

Sasa Milenkovic1,2, Nenad Ilic3, Milan Mitkovic1,2

*1University of Nis, Faculty of Medicine, Nis, Serbia*

*2Clinic for Orthopaedic surgery and Traumatology, University Clinical Centre Nis, Serbia*

*3Clinic for Cardiovascular and Transplant surgery, University Clinical Centre Nis, Serbia*

Abstract

Purpose. Acetabular fractures are severe injuries with an uncertain final functional outcome. Methods. We retrospectively analysed 63 patients from 2008. to 2018. We followed complications of surgical treatment for acetabular fractures in 52(82.53%) men and 11(17.46%) women, average age of 45.06 years- old (from 14 to 77). Results. Road traffic accidents were the cause of fractures in 51(80.95%) patients. According to Letournel and Judet 37(58.73%) patients had elementary acetabular fractures, whereas 26 (41.26%) patients had complex fractures. The average follow- up time was 6.15 years (from 2 to 10). Traumatic sciatic/ peroneal nerve injury was present in 9 (14.28%) patients and iatrogenic in 2(3.17%) patients. Early revision osteosynthesis was done in 1 (1.58%) patient, 3 (4.76%) infections and 3(4.76%) patients with deep venous thrombosis (DVT) were present. Heterotopic ossification (HO) was present in 11(17.46%) patients, AVN of the femoral head was diagnosed in 9 (14.28%). Average time of definitive acetabular osteosynthesis was 5.09 days from the injury (from 1 to 21 days). Anatomical reduction of fracture was achieved in 54 (85.71%) patients. Post- traumatic OA was present in 14 (22.22 %) patients. Final functional outcomes, according to Merle d’Aubigné score were: excellent in 20 (31.74%), good in 28 (44.44%), moderate in 11 (17.46%), poor in 4(6.34%) patients. Due to post- traumatic OA and AVN of the femoral head 23 (36.5%) patients underwent THA. Patients underwent THA after the average of 4.28 years (from 1 to 8) after previous acetabular fracture osteosynthesis. Conclusion Complications and results suggest that in addition to the urgent hip reduction in dislocated fractures, early definitive acetabular osteosynthesis and anatomical reduction, the severity of initial trauma significantly have an effect on results. Given the specifics, acetabular fractures require surgical experience and treatment in tertiary care facilities.

**Keywords: Acetabulum, Fractures, Treatmnent, Trauma Center**

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