

SURGICAL TREATMENT OF PIPKIN IV COMMINUTIVE FRACTURE ASSOCIATED WITH HAEMATOMA, SIGNIFICANT SOFT TISSUE DAMAGE, AND DEEP INFECTION – A CASE REPORT

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Femoral head fractures associated with acetabular fractures are uncommon injuries usually resulting from high-energy mechanisms. This paper is aimed to present a case with successful treatment of Pipkin IV, a comminutive fracture of the head of the femur associated with hematoma, soft tissue damage, and deep infection.

Patient D.M. 1976 was injured from some concrete blocks. The patient was a polytraumatized patient with a severe traumatic shock and Pipkin IV dislocated and comminutive fracture of the left femoral head, comminutive fracture of the left acetabulum, and big hematoma of the left femoral region with soft tissue damage of this region. There was a fracture of the pubic and ischium bone on the right side of the pelvis. He was admitted to the Intensive care unit as an urgent case.

First, we performed an open reduction and internal fixation of the left acetabulum with plate and screws. The patient after that got a serious deep infection of the hematoma in the left femoral region so we had to treat this infection for two months. We had to wait for the next three months without any symptom or sign of the infection (CRP levels were normal) and after that, we performed the application of subtotal prosthesis after removal of all bone fragments of the left femoral head.

The patient had no signs of infection after the second operation and we referred him to receive intensive physiotherapy during the next three months. He could walk without any support three months after the second operation and after continuous physiotherapy and in that time, the range of movements of his left leg was only slightly limited.

We performed x-ray control a year after the operation and the patient developed the signs of ectopic ossification, but the range of motion remained only minimally limited. The Harris Hip Score in that time was 81.

The main treatment should always be an immediate anatomic reduction of the fragments with minimal soft tissue injury and fixation with ORIF in all other Pipkin fractures, but in cases with Pipkin IV fractures associated with previously extensive soft tissue damage and deep infection we recommend waiting for the second operation for at least three months after disappearing of all symptoms and signs of the infection. *Acta Medica Medianae* 2023;62(1):79-84.

Key words: Pipkin fracture-dislocation, soft-tissue, hematoma, complications