

72 years (range 35-94).

### Results

Important breakage occurred 6 month postoperatively (range 1-19 month). In 10 cases breakage was secondary to delayed or nonunion, which was thought to be mainly due to insufficient reduction of the fracture, wrong handling, incorrect drilling in the critical "red zone" (weak point of the nail around the insertion hole for the lag screw due to forces more than 1800 Newton), and in two cases due to loss of the lag screw because of missing set screw. In 1 case, breakage was apparent during elective metal removal following complete fracture healing. Short-term outcome was evaluated six months after operative revision using Harris Hip Score in 11 out of 13 patients showing a mean score of 84%. Complete radiological fracture healing has been found in 11 patients available for follow-up within 6 month after revision surgery.

### Conclusions

Even though breakage of cephalomedullary nail osteosynthesis of trochanteric and sub trochanteric fracture is a severe complication, the result of our study demonstrate that revision surgery is warranted and provides good clinical and radiological short-term results.

**Keywords:** trochanteric fractures, gamma nail, breakage, complication

## CLOSED K-WIRE METHOD OF PROXIMAL HUMERUS FRACTURES OSTEOSYNTHESIS



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**Aim of the study:** evaluation of the results of the surgical treatment by closed reduction, fixation with K-wires of fractures of proximal humerus in patients treated in IEM from Chisinau.

**Material and methods:** during the period 2015-2016, 183 patients were examined and treated for fractures of the proximal humerus of different complexity levels. Out of the total number of patients, 50 (27,3%) patients underwent surgical treatment. Out of the total number of patients treated surgically, 13 patients were operated through the minimally invasive method with indirect reduction of the fracture and osteosynthesis with K-wires in closed fracture focus. The rest of the patients treated surgically 37 (20,2%) patients, underwent the open reduction, internal fixation through other methods described in specialty literature (ORIF).

**Results:** the study group consisted of 13 (7,1%) patients. The average age was 59,53 years. Patients treated using minimally invasive method, the sex ratio being: women – 8 (61,5%) and men – 5 (38,5%) persons. Immediate results were appreciated according to postoperative radiological appearance, in 100% cases all the fractures united in axial alignment, it was appreciated as positive results. Follow-up results valued according to radiological appearance, full range motion of the traumatized shoulder joint in comparison with the contralateral (healthy) arm, and the quality of life: excellent and good in 10 (76,9%) cases, satisfactory – 2 (15,4%) cases and unsatisfactory – 1 (7,7%) case. It was determined the following complication – the inflammation around the K-wires in 3 cases.

**Conclusions:** Osteosynthesis with K-wires in closed outbreak constitutes a favorable method for the surgical treatment of proximal humeral fractures. This method is characterized by reduced traumatologic trauma, minimal hemorrhage and minor risk of perioperative complications.

**Keywords:** proximal humerus, K-wire osteosynthesis, minimally invasive.

## FEMORAL ASEPTIC PSEUDARTHROSIS WITH IMPLANT FAILURE – CASES PRESENTATION



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### Objective

Management of the femoral implant failure is one the hardest situation faced in traumatology. Our study try to understand the causes which lead to pseudarthrosis after primary osteosynthesis of femoral fracture with breakage of the implant and to establish a therapeutical protocol which can be applied to these cases.

### Material. Methods.

We performed a retrospective study between 2011 and 2014, analyzing all patients with femur fractures treated in our hospital or in other hospitals but which came in our Clinic with pseudarthrosis and implant failure or breakage.