mostly in elderly women with osteopenia or in patients who have had loosening of the femoral component. Periprosthetic fractures around the femoral stem after THA represent a significant and growing technical challenge for othopaedic surgeons, requiring proficiency in both: THA and trauma care. Femoral fractures at the tip of a stem of a THA (Vancouver type B1 fractures) occur in 75% of all patients with periprosthetic fractures.

Aim of the study. To analyze the statistics of Orthopedics and Traumatology Hospital for the purpose of corelating them with the international statistics, and to demonstrate the incident rate of periprosthetic femoral fractures of all the revisions of hip arthroplasty that were performed in 2017-2019 years.

Materials and methods. The study group consisted of 23 cases of periprosthetic femoral fractures after hip arthroplasty treated between 2017 - 2019, 9 males and 14 females. Fractures were classified according to the Vancouver system and stratified as to treatment method.

Results. According to the study, out of 23 patients with periprosthetic femoral fractures, 5 of them were Vancouver type B1 fracture, 4 - type B2, 6 patients type B3 and 6 of them type C fractures. According to the statistics, 9 patients with periprosthetic fractures have the age between 70-80 years, 4 of them have the age between 50-60 years and 3 more than 80 years.

Conclusions. The results of the analysis shows us that periprosthetic femoral fractures appear in 20% of all the revisions of hip arthroplasties. The periprosthetic femoral fractures have a higher incidence because of the growth of THA, that is why a surgeon that performs a THA should be prepared for a possible revision of hip arthroplasty.

Key words: periprosthetic femoral fractures, Vancouver's classification, total hip arthroplasty.

119. THE TWO-STAGE SURGICAL TREATMENT VS PRIMARY INTERNAL FIXATION OF PILON FRACTURES

Author: Andrei Guzun

Scientific adviser: Gheorghe Croitor, MD, PhD, Associate Professor Department of Orthopedics and Traumatology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Tibial pilon fractures are severe injuries to the distal articular surface of the tibia and, although described for more than a hundred years, remain to be a challenge for the orthopedic surgeon, since it involves obtaining an anatomical reduction of the articular surface and an adequate management of the soft tissues, the lesions of which the most often dictate treatment options. Various treatment methods are available, depending not only on the fracture type but mostly on the extent of the soft tissue injury. Most frequent procedure is a two-stage surgery: the initial closed reduction of the fracture via primary placement of an ankle joint-spanning external fixator, if possible in conjunction with open reduction and internal fixation of the fracture dibula followed by a secondary procedure after soft tissue recovery by open reduction and internal fixation can allow the anatomical reconstruction of the fractured articular surface in a single stage.

Aim of the study. This study was performed to analyse the results of staged treatment protocol and the primary internal fixation for treating distal tibial fractures.

Materials and methods. A literature search was performed using PubMed. The combination of words "tibial pilon fractures staged treatment AND primary fixation" has been used for searching.

Results. 21 articles were obtained as a result of the search. Six articles were excluded due to content (articles about primary arthrodesis, lymphedema and external fixator). Of the 15 articles included in the study, in 7 articles were presented the results of surgical treatment of pilon fractures in two stages, in 4 articles the results of the primary fixation and in 4 articles the comparative results of these two methods. In the studies the rate of infection (superficial or deep infection, osteomyelitis), malunion, nonunion, duration of hospital stay, neurovascular injury, pain intensity and patients' satisfaction with AOFAS score were compared between the two groups. There was no significant difference between the groups in measured variables except hospital stay which was significantly longer for the two-stage group. O'White, Carter, Duckworth and the co-authors recommend to treat definitely a patient with pilon fractures type C and Tscherne 1, 2 in one stage ORIF during the first 24 hours after the injury.

Conclusions. Recent studies demonstrate low complications with early definitive fixation of pilon fractures type C (AO/OTA). However, the overall prognosis for these injuries often remains poor.

Key words: Pilon fracture; Open reduction internal fixation; Two-stage surgery.

120. SURGICAL TREATMENT OF TIBIAL PLATEAU FRACTURES

Author: Vadim Madan

Scientific adviser: Gheorghe Croitor, MD, PhD, Associate Professor Department of Orthopedics and Traumatology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Tibial plateau fractures represent approximately 1% of the total fractures in the general population and 8% among the senile age population. The peak incidence among men is between 30 and 40 years, while in women between 60 and 70 years. It is considered that most of such fractures are caused by road accidents and catatraumatisms. Isolated fractures of the lateral plateau occur in 55-70% cases, 10-25% medial plateau and 10-30% are bicondylar. Approximately 90% of fractures are associated with different degrees of soft tissue injury and 1-3% are open. Tibial plateau fractures in 7 - 43% of cases are accompanied by collateral ligament injury and in 23% anterior cruciate ligament injury in high energy trauma can be associated with neuro-vascular lesions, compartment syndrome, deep vein thrombosis, soft tissue crushes or wounds. The frequency of failures and complications of surgical treatment of these lesions remains considerable. Although the development of modern surgical techniques and fixation implants has generally improved the functional results obtained after such fractures, however, the optimal way of managing these extremely complex lesions remains controversial.

Aim of the study. Analyzing the results and methods of surgical treatment of patients with tibial plateau fractures treated in Orthopedics and Traumatology Clinic "V. Bețișor " durind 2014-2018 years.

Materials and methods. They were analyzed 100 clinical cases: men -40 and women -60, mean age 54 years. Trauma circumstances: habitual trauma -75 cases, traffic accident -15, precipitation -6, sport -3, aggression -1. Schatzker classification was used: type I was meet in 10 cases, II -25, III -15, IV -5, V -28, VI -17; 95 close, 5 open. For imaging examination were used X-ray and CT. Surgical treatment consisted of: close reduction , internal fixation -