**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

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**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 cases. Meniscus lesions have been reported in over 50% of cases. Fractures caused by 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. Beţişor " 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 -15, interna

15 cases (10- percutaneus canulated screws arthroscopic assisted, 5- external fixator), open reduction, internal fixation – 85 cases. Bone graft was done in 20 cases.

**Results.** Postoperative follow up was performed at 6, 12, 18, 24 weeks. Patients were evaluated according to the Lysholm Knee Scoring Scale, obtaining an average score of 86 points. Bone healing was noticed in a period of between 12 to 18 weeks. Postoperative complication developed in 15 cases. Results were depending on the stability of fixation, precocity, rightness of functional recovery and patient compliance.

Conclusions. Favorable functional results and less complication were meet in cases of individual approach of surgical treatment, the suitable choice of implants and less invasive surgical techniques.

Key words: fracture, tibial plateau, treatment

## BREAST RECONSTRUCTION ON IRRADIATED TERRITORY USING 121. TISSUE EXPANDER TECHNIQUE AND LATISSIMUS DORSI FLAP: A CASE REPORT

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**Background.** Postmastectomy radiation therapy is a well-established risk factor for complications before and after breast reconstruction. The reconstruction of a large variety of breast cancer surgery defects, especially on a pathologically modified field can be challenging for plastic surgeons, autologous tissue transfer being often indicated to achieve improved tissue quality during breast reconstruction after radiotherapy. The aim was to discuss the approach in a modified irradiated territory for breast reconstruction and analyze satisfaction with aesthetic outcome between patient and plastic surgeons.

Case report. A 33 years old female after a total unilateral breast mastectomy due to breast cancer. After surgery she followed 3 cycles of radiatio-therapy. At 6 months after primary surgery she undergone a comprehensive multilateral examination after which has received medical agreement for breast reconstruction of the amputated breast. During examination at admission in Plastic surgery clinic, she has been complaining on pain in the region of the scar left after mastectomy which were exacerbated during thoracal inspiration. In the first stage of the treatment it was decided to remove the aggressive adhered on hemithorax scars and to reconstruct the remained defect after scars' removal with a pedicled latissimus dorsi flap. The second stage - implanting a tissue expander with a maximum volume of 500 ml, followed after recovering from the first stage. The third stage took place after filling the expandable balloon. Under the tissue's excess instead of expander we have placed a mammary prothesis.

Conclusions. Among the plethora of breast reconstruction techniques, the LDF is a versatile, reliable means for soft tissue coverage, providing form and function with acceptable perioperative and long-term morbidities, especially in patients with previous radiation. Using plastic, reconstructive andaestheticsurgerymethods in a correct order allows to rebuild the breast after oncological amputations even if the region was actinically treated.

**Key words:** breast reconstruction, latissimus dorsi flap, dermotension, actinic radiation.