

4. DIAGNOSIS AND TREATMENT OF TIBIAL PLATEAU FRACTURES IN EMERGENCY MEDICINE INSTITUTE IN THE REPUBLIC OF MOLDOVA DURING 2019

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Introduction. Tibial plateau fractures represent about 1% of the total fractures in the general population, 8% among old people, and 56.9% of the proximal tibia fractures. The sex distribution is an alternating one, in men, the most traumas of this kind are registered at the average age of 40-44 years, and in women, it is 55-59 years. Tibial plateau fractures most often occur through an indirect mechanism, valgus/varus movements, or vertical shock. Tibial plateau fractures at different ages, most often, have different production mechanisms. Tibial plateau fractures in the elderly occur as a result of falls with low kinetic energy (falls from one's height, slips, etc.), this is due to osteoporotic changes that occur in old age, especially in women who have more severe osteoporosis. Injuries characterized by high kinetic energy predominate among young people, such as road accidents, falls from high locations, and sports trauma. Tibial plateau fractures affect knee alignment, stability, and movement. Early detection and appropriate treatment are critical in minimizing the patient's disability and reducing the risk of complications, especially post-traumatic arthritis.

Aim of study. To emphasize the diagnostic methods and the results of the treatment of tibial plateau fractures treated in Orthopedics and Traumatology Clinic „V. Bețișor” during 2019.

Methods and materials. We analyzed 62 clinical cases: 32 men and 30 women; The mean age was 60 years among men and 64 years among women, and the general mean age was 61 years. As of Schatzker classification, there were 7 cases of type I, 12 – type II, 10 – type III, 12 – type IV, 12 – type V and 9 cases of type VI. CT scan and radiography were performed in 57 cases, while only radiography was done in 5 cases. 52 cases of habitual trauma, 6 car accidents, 2 sports trauma, and 2 cases of aggression were reported. Surgical treatment was done in 38 cases. Open reduction and internal fixation was done in 33 cases, closed reduction and internal fixation - 5 cases (4 percutaneous screws, 1 external fixator). 24 cases were solved by conservative treatment because of no absolute indications for surgical treatment or because of the very high anesthesia risks.

Results. Postoperative follow-up was performed at 6, 12, 18, and 24 weeks. Patients were evaluated according to the Knee Society Clinical Rating System with an average of 85 points. One case of death on the 11th day of hospitalization was caused by comorbidities. Complications occurred in 5 cases (infection of the incision).

Conclusion. The best results and less complications were achieved during a close and personalized approach to each case when proper investigations and methods of reduction, fixation were done and the patient's compliance was good.