

## PARTICULARS OF SURGICAL TREATMENT OF TIBIAL PLATEAU FRACTURES

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**Background.** Tibial plateau fractures are difficult to treat in orthopedic surgery and this calls for unique methods of treatment that have successful outcomes. **Study objective.** To evaluate the efficiency of different surgical interventions in the management of tibial plateau fractures using various classification systems. **Material and methods.** This was a retrospective review of surgical cases from 2018-2022 at the Department of Orthopedics and Traumatology, Nicolae Testemițanu University Data collected were on patient demographics, fracture types, type of surgical procedures carried out and postoperative results. The findings were supported by applicable literature from PubMed, NCBI as

well as other scientific databases. **Results.** The approach to specific fracture patterns varied based on AO and Schatzker classification systems which guided treatment decisions. Open reduction internal fixation (ORIF) was applied for anatomic repositioning while minimal invasive plate osteosynthesis (MIPO) provided stable fixation. Complications were rare with most patients having good functional recovery. **Conclusion.** Optimum care planning and adherence to classification-based operative strategies are necessary for effective management of tibial plateau fractures. This study highlights customized measures **Keywords:** tibial plateau fractures, surgical treatment

## TISSUE EXPANSION THERAPY IN PATIENTS WITH POST-BURN SCARS

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**Introduction.** Post-burn scars can have an important influence on both functional and aesthetic aspects of the patients' lives. Tissue expansion is a technique that utilizes the body's natural capability to grow additional skin through mechanical stretching, offering a promising option for scar reconstruction. This meta-analysis aims to combine current evidence on the efficacy, safety, and outcomes of tissue expansion in patients with post-burn scars, thereby offering a comprehensive assessment of its viability as a treatment option. **Aim of study.** Evaluation of the effectiveness of tissue expansion in treating patients with post-burn scars. **Methods and materials.** Methods include a systematic and comprehensive analysis of PubMed research, Google Scholar articles and Cochrane Library studies published between January 2000 and December 2022. The research was done by using the keywords "tissue expansion therapy", and "post-burn scars". **Results.** A total of 15 studies encompassing 750 patients met the inclusion criteria. The combined analysis revealed a significant improvement in Vancou-

ver Scar Scale (VSS), with mean reduction from  $9.8 \pm 2.1$  to  $3.5 \pm 1.0$  ( $p < 0.05$ ). The level of satisfaction among patients was substantial with 82% rating their outcomes as 'good' or 'excellent'. The overall complication rate was 18% with hematoma (6%), expander exposure (5%) and infection (7%) being the most common. Considering the complications, the majority were successfully managed without long-term adverse effects. **Conclusion.** Tissue expansion is an effective method for treating patients with post-burn scars, offering significant aesthetics and functional outcomes. While complications are relatively common, they are generally manageable and do not substantially interfere with the overall positive results of the procedure. These findings advocate the use of the tissue expansion technique as viable choice for post-burn reconstruction, emphasizing the importance of careful patient selection and constant monitoring to optimize outcomes. Further research must be conducted to further develop the technique and minimize the complication rates.