

## **Abstract**

**Title:** Conservative treatment of proximal humerus fractures in the elderly: literature review

**Objectives:** The aim of this thesis is a search processing mostly foreign available sources in the field of proximal humerus fractures in the elderly. The analyzed studies focus on the effectiveness of early therapy using early mobilization and also on the aspects that lead to the persistence of problems related to this diagnosis in the elderly. These studies are evaluated and compared on the basis of theoretical knowledge of the issue. The purpose of this work is to obtain an up-to-date overview of the issue and to present evidence of the effectiveness of this type of treatment.

**Methods:** The diploma thesis is processed in the form of a literary research. The sources were researched in the PubMed, PEDro, MEDLINE, EBSCOhost, Scopus and Web of Science databases. The first part of the thesis contains a theoretical introduction to the issue of aging and related changes, it also focuses on fractures of the proximal humerus and their treatment. The second part of the work has a descriptive - analytical character and contains an analysis of selected studies that focus on the evaluation of early therapy after fractures of the proximal humerus.

**Results:** At the end of the search, 6 studies focusing on early therapy in patients older than 60 years after a proximal humerus fracture met the specified criteria. The evaluation tool, which was common criterion for selected studies, was the Constant-Murley score. Thanks to the strict selection criteria, the results can be applied to a narrower group of seniors. The topic of the studies is conservative treatment of proximal humerus fractures with a focus on evaluating the timing of therapy initiation and termination of shoulder joint immobilization. Based on the findings from the individual studies, it can be assumed that the initiation of passive movements in the early phase of rehabilitation treatment in elderly patients with predominantly uncomplicated, undislocated or less dislocated proximal humerus fractures appears safe and may shorten the overall recovery time corresponding to follow-up measurements within six months. Thus, early onset of passive movements may be an alternative treatment to limb immobilization for three weeks or more. Aspects that may directly affect the functional outcome of treatment or the long-term persistence of problems in the elderly include: presence of comorbidities, complex multipart fractures, long-term immobilization, delayed rehabilitation treatment, shoulder joint stiffness, rotator cuff disorder and the age of the patients.

**Keywords:** proximal humerus, fracture, shoulder, elderly, trauma, conservative treatment, rehabilitation, early mobilization