

Dissertation work deals with the strategy of the operative treatment of the proximal humerus with angular stable nails. In experimental part were by the novel technique from cadavers prepared three part fractures and stabilized by the intramedullary nail Targon PH tested. In the clinical part were analysed long-term results of the treatment by this technique in own cohort of patients. Experimental part of the thesis showed excellent biomechanical features of the osteosynthesis and confirmed suitability of this technique for the treatment of humeral head fractures. Longterm results obtained in the clinical part then confirmed effectiveness of the treatment by intramedullary nail Targon PH for all types of the fractures of the proximal humerus. In the group of the fractures of the surgical neck were found out majority of excellent or good results in all age groups with low rate of complications, in the group of the fractures of humeral head significant dependence of the clinical result and head necrosis development on the quality of the reduction of the fracture.