

Abstract

Total hip replacement is one of the most common surgeries in orthopedics. Complete hip replacement can be addressed with several different types of surgical approaches. In this work we deal mainly with the anterior and anterolateral approach. The theoretical part of this work summarizes the basic knowledge about the anatomy, kinesiology of the hip joint and the prearthrotic causes leading to complete hip replacement. Furthermore, the types of surgical approaches, types of total endoprostheses are mentioned and the knowledge about soft tissue healing and early postoperative rehabilitation is summarized. The aim of this work is to determine whether rehabilitation will be faster in the first days after surgery in patients operated by the anterior approach, depending on the gentle approach and respect for anatomical structures, compared to the anterolateral approach. We present a group of 24 patients, 12 of whom underwent anterior approach and 12 anterolateral approach. In the practical part we evaluate and compare early postoperative rehabilitation in both approaches. The parameters we evaluate are the muscular strength of abduction, flexion and extension in the hip joint. Furthermore, the passive and active range of motion in the hip joint during abduction, flexion and extension. We also evaluate verticalization, walking and walking the stairs. In all evaluated parameters, it was shown that the patients after the operation with the anterior approach were better than the patients after the operation with the anterolateral approach. The results showed that rehabilitation is faster in the first days after the operation with an anterior approach, as this approach is very gentle.