

## **Abstract**

### **Title:**

The case study of physiotherapy treatment of a patient diagnosed with a condition after osteosynthesis of the left femur in the distal part

### **Objectives:**

The aim of this thesis is to summarize theoretical informations and knowledge about the issue of fracture of the distal part of the femoral diaphysis and its surgical treatment by osteosynthesis with the elaboration of a case study of specific patient with diagnosis listed above, including the setting of short-term and long-term goals, monitoring the process and results of therapeutic units with the evaluation of their effect. The thesis is written from the perspective of physiotherapist.

### **Methods:**

This thesis is divided into two parts, which are theoretical and special part. The theoretical part discusses the kinesiology of the femur in the hip and knee joint, general characteristics of fractures, specific characteristics of fractures of the distal part of the femoral diaphysis, fracture treatment by osteosynthesis and physiotherapeutic approaches for physiotherapeutic treatment of this diagnosis. The special part presents a case study of a patient with the diagnosis listed above. A record of ten therapeutic unit is presented within the continuous professional practice at the Faculty Thomayer Hospital in Prague in the period from 6.1. to 31.1.2025.

### **Results:**

One of the main results is a reduction of pain in the left knee joint around the scar and a reduction of the burning sensation of the scar. Furthermore, there is an improvement in active and passive ranges of motion in the left knee joint, an improvement in gait stereotype and an increase of muscle strength of the lateral pelvic corset, m. gluteus maximus bilaterally, flexors of the left knee joint and left m. quadriceps femoris.

### **Keywords:**

femur, fracture of the distal femoral shaft, osteosynthesis, physiotherapy