

## **ABSTRACT**

### **Author**

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### **Title**

Case Study of Physiotherapeutic Care for a Patient Diagnosed with Distal Radius Fracture

### **Objectives**

The aim of this bachelor thesis is to present the theoretical and practical aspects regarding distal radius fractures. The theoretical part aims to introduce the issues of fractures, particularly distal radius fractures, the anatomical and kinesiological foundations of this area, and the methods of treating these fractures, including physiotherapeutic care for patients diagnosed with a distal radius fracture. The practical part aims to develop a case study of physiotherapeutic care for a patient diagnosed with a distal radius fracture, including diagnostic and therapeutic procedures guided by knowledge acquired during the bachelor's degree in physiotherapy.

### **Methods**

The thesis consists of two parts – theoretical and practical. The theoretical part is based on a review of professional sources and includes a description of the anatomy and kinesiology of the forearm, as well as a description of fracture-related issues, their classification, specifically focusing on distal radius fractures and their examination, treatment methods, and physiotherapeutic procedures recommended by current professional sources for patients with this diagnosis. The practical part involves developing a case study of physiotherapeutic care for a patient diagnosed with a distal

radius fracture, including initial and final kinesiological analysis and a description of eight therapeutic sessions conducted under my guidance. The practical part concludes with an evaluation of the therapy's effectiveness and prognosis.

## **Results**

The physiotherapeutic care provided to the patient in the case study was effective. After the therapy sessions, there was an improvement in the patient's musculoskeletal condition. This improvement included reduced pain in the injured area, improved joint mobility in the injured left hand and wrist, enhanced weight-bearing function of the left hand and wrist, increased joint range of motion in the wrist and left shoulder joint, increased muscle strength in the forearm and hand of the injured limb, improved movement patterns such as shoulder abduction, neck flexion, and push-up stereotype, reduced muscle shortening of the paravertebral and thoracic muscles, decreased neurological deficits in the injured left hand, and the removal or reduction of various reflex changes in the left hand and cervical spine area.

## **Conclusion**

The predetermined objectives of this bachelor thesis were achieved. Both the theoretical and practical parts were developed according to the instructions of the Department of Physiotherapy at the Faculty of Physical Education and Sport, Charles University. The physiotherapeutic procedures in the patient's case study were appropriately chosen, as a positive therapeutic effect on the patient's condition following a distal radius fracture was observed after completing the therapy sessions.

## **Keywords**

fracture, distal radius, case study, physiotherapeutic care, treatment, therapy, injury, physiotherapy, examination