

Abstract

The aim of this thesis is to present the methods of therapy of neuromuscular scoliosis in the Czech Republic and in the world and to compare their effects on the basis of published research.

The theoretical part describes the basic anatomy of the spine, biomechanical view of the spine and its pathology. Subsequently, the concept of scoliosis is characterized, the classification of scoliosis according to different criteria and idiopathic scoliosis is briefly described. Neuromuscular scoliosis, its definition, classification and the most common disease in pediatric patients, where secondary scoliosis develops and is an integral part of the clinical picture of the underlying disease, are described in detail. The basic examination of idiopathic scoliosis and specifics for the examination of neuromuscular scoliosis are then described. Last but not least, the therapy in the Czech Republic and subsequently abroad is reviewed.

The practical part of the thesis is based on a case report of a patient with primary disease spinal muscular atrophy type I who developed neuromuscular scoliosis. Based on the initial kinesiological analysis, an appropriate therapy will be selected. The Cobb angle will be monitored as an objective parameter.