

## **Abstract:**

**Name of the diploma thesis:** Condition of patients with the diagnosis of spina bifida cystica with myelomeningocele and subsequent rehabilitation intervention

**Goal of the work:** Spina bifida (cleft spine) is a congenital defect resulting from failure of fusion of embryologic halves of vertebral arches. Spina bifida belongs to the group of congenital abnormalities of the central nervous system, which manifest themselves through neural tissue anomalies and bony changes of the spine. Since there is not a single Czech publication dedicated to the diagnosis of spina bifida, the first goal of this diploma thesis was to thoroughly describe the diagnosis of spina bifida, with special emphasis on cystical spina bifida, and to introduce opinions of the Czech and mainly international experts on this issue. In the second part of this diploma thesis, based on a case study of three patients with the diagnosis of congenital spina bifida cystica with myelomeningocele, the goal was to compare the historically, as well as currently applied rehabilitation treatment of these patients and to confirm that the rehabilitation procedures differed, depending on the height of the lesion and the availability of qualified rehabilitation care.

**Solution method:** To process the gathered information about spina bifida from specialized Czech and international literature. To find and thoroughly introduce in case studies three patients with spina bifida cystica with myelomeningocele, on which physiotherapeutic intervention has been applied, and to critically assess the applied rehabilitation treatment. The method of comparison of existing physiotherapeutic intervention, kinesiological analysis and the problems of patients with differing height of the lesion has been used to obtain the results.

**Results:** These results suggest that the applied rehabilitation treatment has not been dependent on the height of the lesion of myelomeningocele and at the same time has significantly depended on the availability and competence of the rehabilitation care.

**Key words:** Spina bifida, myelomeningocele, hydrocephalus, folic acid, rehabilitation treatment