## **ABSTRACT**

The main objective: The main objective of this bachelor thesis is to summarize information about the origin and development of plagiocephaly, its diagnosis and treatment options. It also deals with the effect of plagiocephaly on the child's psychomotor development, posture and asymmetric posture.

Methodology: The selection of probands took place in the Children's Day Rehabilitation Hospital in Hradec Králové in the autumn of 2018 and in the Institute of Technical - Prosthetic Care Malík a spol. in 2019.

My criteria for selecting probands were: natural vaginal delivery or Caesarean section, Apgaar score 8 - 10, age 3 - 4 months, diagnosed plagiocephaly or asymmetric positional syndrome. I observed the development of the skull shape and psychomotor development in each of them for 3 consecutive months. In the children's day hospital in Hradec Králové, I monitored the course of physiotherapeutic care, the influence of positioning and Vojta's reflex therapy on the child's development. I photographed the children (group A) during therapy and measured the head circumference, CVAI and CI indices. This research took place from September to December 2018. I worked on prosthetics in August 2019, where I started monitoring 7 probands (hereinafter referred to as group B), whose head was measured using a craniometer, plaster of the head, handing over the helmet and subsequent visits to adjust the shape.

Results: The research involved 10 probands, of which 6 were boys and 4 girls. In group B, where the treatment was supplemented with a cranial helmet, the values of the CVAI index decreased, so there was an improvement in plagiocephaly. On the other hand, in group A there was an increase in the CVAI index and a deterioration in the degree of plagiocephalyConclusion: In probands in group A, the results were significantly slower compared to group B.

Key words: Plagiocephaly, abnormal head posture, psychomotor development, cranial remodeling orthosis, persistent predilection