

## **Abstract**

This bachelor's thesis deal with causal connection between congenital involuntary abnormalities of visual fixation, particularly nystagmus and lowering of the quality of the postural system. This work is divided to two main parts, which are: Theoretical review and practical study. In the theoretical part I put description of human postural system, including structure, function and consequences with human physiology in biopsychosocial model of health.

There are also mentioned some of the examination methods, aimed to the human motor control system in standing and the gait test. Furthermore there are characterizations of selected diseases, affecting motor system.

The practical study, compares two groups of probands. One of them is group, including persons with congenital nystagmus of ophthalmology etiology and second one includes „healthy“ persons, without any neurology diagnosis.

The comparison is based on consequences of clinical tests, specialized to balance in stance and gait.

The consequences of the comparison apparently mean, that there is a statistical significant connection between the visual fixation and the postural system in this selection of probands. It is possible to indicate this group of patients to practice rehabilitation physiotherapeutic methods, aimed to improve the postural control and the coordination of movement in general.

**Key words** Postural system, postural ontogenesis, postural function, nystagmus, human motor control