

Abstract:

The aim of the thesis was to find out and evaluate the long-term functional-motor consequences of stem cell transplantation in children patients and to propose possibilities of testing and physical therapy of these functional-motor consequences.

The first part of the thesis is aiming to research available sources about bone marrow transplant and its consequences. It summarizes possibilities of testing the bone marrow transplant patient's motor abilities. Furthermore, it summarizes possibilities of physiotherapy in bone marrow transplant patients.

The second part of the thesis processes BOT2 results in bone marrow transplant children patients . The thesis evaluates its results compared to healthy population and tests an impact of various factors on function-motor abilities of the patient.

The children after bone marrow transplant have mostly below average results in motor tests, especially in manual coordination section. The hypothesis were partially confirmed. Children which underwent radiotherapy have function-motor consequences in manual coordination and fine motor skills. Children which underwent corticotherapy have function-motor consequences in manual coordination.