The bone marrow transplantation is proceeded by transfusion of blood stem cells to the patient who is indicated to this procedure. Most often indications are hematooncological malignancies. The bone marrow transplantation is for some of the patients the only chance of cure. The conditioning including chemotherapy and radiotherapy of various intensity is necessary for successful bone marow transplant. It causes several side effects such as immobilization, muscle strength loss and endurance loss. It is possible to prevent or at least slow down these side effects by early rehabilitation.

This literature review summarizes present knowledge about influence of physical activity on patient indicated to bone marrow transplant during treatment and in the after-treatment period. Endurance training improves aerobic capacity of the patients and correlates with their quality of life. The resistance training helps to prevent muscle strength loss during immobilization and chemotherapy. Intensity of training sessions is still a subject of discussion because of the instable clinical state of the patient during treatment. There was no negative effect of physical activity proven on patients undergoing bone marrow transplant.