

## **Abstract**

The thesis deals with the effect of physical therapy in patients with metabolic and premetabolic syndrome. The theoretical part aims to summarise the knowledge about metabolic syndrome, the etiology of its occurrence and the possibilities of prevention and treatment of the diseases that are its components. It discusses in more detail movement therapy. The practical part aims to evaluate the effect of 3-month physical therapy performed at the Department of Physical Medicine of Motol University Hospital in treating these patients and then, based on the results, to develop a proposal for more effective program. Data were collected retrospectively over five years – 2019-2023. Anthropometric data (body height and weight, waist circumference, umbilical circumference and hip circumference), the power in watts performed by the patients on the cycle ergometer, the length of the therapeutic unit and how many therapies they completed during the 3 months were recorded. We then compared the data with those after 3 months of therapy. There was a statistically significant improvement in all parameters studied. Physical therapy at Motol University Hospital is effective in the treatment of patients with metabolic and premetabolic syndrome. The most risky aspect of treatment failure is the low adherence of patients to therapy. The proposal for making therapy more effective focuses on motivating patients and increasing their treatment adherence.