

BACHELOR THESIS ABSTRACT

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Title of bachelor thesis: Physiotherapy in patients with long-term heart assist devices

Abstract:

This thesis deals with the issue of physiotherapy in patients after the implantation of long-term heart assist devices (in this case of the type HeartMate 3). The goal of this thesis is to find the possibilities of physiotherapy within cardiovascular rehabilitation after surgical implantation of heart assist device and subsequent application of this knowledge in practice.

The thesis is divided into theoretical and practical parts. The theoretical part consists of basic information about the heart muscle and heart failure as the most common cause of implantation of the long-term heart assist device. Next, both heart assist devices in general and concretely HeartMate 3 are presented. Finally, there is a chapter devoted to cardiovascular rehabilitation.

The practical part was created based on professional practice in the IKEM hospital in Prague at the turn of July and August 2020. There is an elaboration of case studies of two probands using functional testing such as the 2 Minute Walk Test and Barthel Index. The results of comparing the input and output examinations are summarized in the discussion and conclusion.

Key words:

physiotherapy, cardiovascular rehabilitation, heart failure, HeartMate 3, long-term heart assist device