




## Fizioterapeutsko liječenje bolesnika sa zatajivanjem srca prije i nakon ugradnje mehaničke potpore

### Physiotherapeutic treatment of heart failure patients before and after mechanical support

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**Uvod:** Zatajivanje srca je kronično, progresivno stanje u kojem srčani mišić ne može pumpati dovoljno krvi kroz srce da zadovolji potrebe tijela za krvlju i kisikom.<sup>1</sup> Posljedica je brojnih primarnih i sekundarnih bolesti koje dovode do oštećenja pumpne funkcije srca i do smanjene rastezljivosti srca. Prepoznavanje simptoma i uspostavljanje dijagnoze je izuzetno bitan dio u liječenju i terapiji bolesnika. Kroz sve oblike liječenja bolesnika, kliničko, medikamentozno i u konačnici kirurško, prisutni su fizioterapijski procesi. Načini praćenja, procjene i same fizioterapeutske intervencije provodi se i bilježi u standardiziranom fizioterapeutskom kartonu te kvalificiranim upitnicima. Pomoćni uređaj lijeve klijetke (LVAD) je mehanička potpora koja se kirurški ugradi. Pomaže u održavanju sposobnosti pumpe srca koja ne može samostalno djelovati. LVAD uređaj, koji se ponekad naziva "mostom za transplantaciju", sada se koristi u dugoročnoj terapiji. Bolesnici često moraju čekati dugo vremena prije nego što prikladno srce postane dostupno. Tijekom ovog čekanja, pacijentovo već oslabljeno srce može se još više pogoršati.

**Prikaz slučaja:** Prikaz slučaja bolesnice s dijagnozom dilatativne kardiomiopatije, zaprimljena preko Hitne službe, nastavak liječenja u Koronarnoj jedinici, te Jedinici intenzivnog liječenja i na kraju na Zavodu za kardijalnu i transplantacijsku kirurgiju. Zbog osnovne bolesti bolesnica je bila priključena na uređaj za izvantjelesnu membransku oksigenaciju, a kasnije operativnim zahvatom joj je ugrađen LVAD. Izuzetno lošeg respiratornog i kondicijskog statusa fizioterapijska intervencija je započela još u jedinici intenzivnog liječenja i nastavila se na odjelu. Nakon niza komplikacija pacijentica je uz učestalu ranu rehabilitaciju kroz 3 mjeseca napustila našu kliniku potpuno samostalna u svakodnevnim životnim aktivnostima. Sada se trenutno nalazi na transplantacijskoj listi.

**Zaključak:** S obzirom na tešku dijagnozu naša bolesnica je uz pomoć ugrađenog LVAD uspjela savladati sve komplikacije koje se javljaju uz ovakva teška stanja. Niz respiratornih i mišićno koštanih komplikacija za vrijeme kirurškog liječenja zahtijevao je posebnu stručnost i znanje fizioterapeuta koji su svojim fizioterapijskim procesima pacijentici pomogli da se ponovno aktivno uključi u svakodnevni životni ritam.

**Introduction:** Heart failure is a chronic, progressive condition in which a heart muscle cannot pump enough blood through the heart to meet the blood and oxygen requirements of the body.<sup>1</sup> It is the result of numerous primary and secondary diseases that lead to impaired heart pump function and reduced heart rate. Recognizing symptoms and establishing diagnosis is an extremely important part of the treatment and therapy of such patients. Through all forms of treatment of such patients, clinically, medically and ultimately surgically, physiotherapeutic processes are present as important factors in the medical team. Methods of monitoring, evaluation and physiotherapeutic intervention itself are performed and recorded in a standardized physiotherapeutic card and qualified questionnaires. The left ventricle assist device (LVAD) is mechanical support that is surgically embedded. It helps maintain the ability of a heart pump that cannot function independently. The LVAD device, sometimes referred to as the "bridge for transplantation", is now used in long-term therapy. People often have to wait a long time before the appropriate heart becomes available. During this waiting, the already weakened heart of the patient may become even worse.

**Case report:** A case study of a patient with diagnosis of dilated cardiomyopathy, received through Emergency services, continuation of treatment in the Coronary Unit, Intensive Care Unit and ultimately at the Institute for Cardiac and Transplant Surgery. Because of the underlying disease, the patient was connected to the extracorporeal membrane oxygenation device, and LVAD was later embedded into the operation. Outstandingly bad respiratory and condition status, physiotherapeutic intervention started in the intensive care unit and continued in the department. After a series of complications, the patient with that has undergone frequent early rehabilitation for 3 months has left our clinic and managed to proceed with daily life activities completely independent. She is currently on the transplant list.

**Conclusion:** Given the difficult diagnosis, our patient has been able to overcome all the complications occurring in such a difficult state with the help of the built-in LVAD. A series of respiratory and musculoskeletal complications during surgical treatment required special expertise and knowledge of physiotherapists who, through their physiotherapeutic processes, helped the patients to re-actively engage in everyday lifestyle rhythm.

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#### LITERATURE

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