

## EP6

### **The Use of HeartMate II LVAD as a Bridge to Recovery**

*Medalion, Benajmin<sup>1</sup>; Fuks, Avi<sup>1</sup>; Porat, Eyal<sup>1</sup>; Ben-Gal, Tuvia<sup>2</sup>*

*<sup>1</sup>Rabin Medical Center, Beilinson Campus, Cardiothoracic Surgery, Petach Tiqva, Israel;*

*<sup>2</sup>Rabin Medical Center, Beilinson Campus, Cardiology, Petach Tiqva, Israel*

**Objective:** With the growing use of LVAD in patients with advanced heart failure, it became apparent that there is a small subgroup of patients, mainly those with non ischemic cardiomyopathy who can undergo reverse remodeling and improve their cardiac function to the extent that the LVAD can be removed. We describe our unique recent experience with such a patient and discuss the current knowledge of this attractive field.

**Methods and Results:** Between August 2008 and November 2011 we used 24 long term LVADs (HeartMate II - 21, HeartWare - 3). Nineteen patients had ischemic cardiomyopathy and 5 patients had non ischemic cardiomyopathy. We describe a 45 years old obese (BMI=35), diabetic, female who was diagnosed as having non ischemic cardiomyopathy in 2008, and progressively deteriorated despite optimal medical therapy to a NYHA class IV. Pre LVAD investigation revealed V<sub>O</sub>max of 6.3 l/kg/min, severe LV dysfunction, non significant coronary artery disease, pulmonary pressure of 65/35 mmHg, PCWP of 33 mmHg. She underwent uneventfull LVAD (HeartMate II) implantation on August 2010. In addition, she continued to receive heart failure medical therapy. Her functional status improved dramatically but she continued to gain weight. After 6 months she started to feel worse and malposition of the pump was identified, most probably due to her weight gain (BMI=45). In an attempt to become a better transplant candidate, she underwent uneventfull gastric sleeve resection in August 2011. During a month of follow up she lost 17 kg and despite an unexpected pump stop she felt well with EF=40% on echocardiography. She underwent uneventfull HeartMate II explantation on November 2011 and discharged home 5 days later in good condition.

**Conclusions:** The current case, and the selected knowledge from the literature of up to 60% LVAD explantation rate, and up to 83% 3 years freedom from heart failure recurrence, offer hope for a new strategy for selected patients supported with LVAD.