

Title:

Walking Pre-Heart Transplant Patients With Percutaneously Placed Axillary-Subclavian Intra-Aortic Balloon Pump

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Session Title:

Research Poster Session 2

Slot (superslotted):

RSC PST 2: Saturday, 29 July 2017: 12:00 PM-1:30 PM

Slot (superslotted):

RSC PST 2: Saturday, 29 July 2017: 2:45 PM-3:30 PM

Keywords:

heart failure, heart transplant patients and percutaneously-placed axillary-subclavian intra-aortic balloon pump

References:

Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA guideline for the management of heart failure: executive summary [published online June 5, 2013]. *Circulation*. 2013;128(16):1810-1852. doi: 10.1161/CIR.0b013e31829e8807.

Estep J, Cordero-Reyes AM, Bhimaraj A, et al. Percutaneous placement of an intra-aortic balloon pump in the left axillary/subclavian position provides safe, ambulatory long-term support as bridge to heart transplantation. *JACC Heart Fail*. 2013;1(5):382-388.

Abstract Summary:

This activity will discuss an innovative approach of mobilizing pre-heart transplant patient with percutaneously placed axillary-subclavian intra-aortic balloon pump. New nursing protocol to safely manage this patient population was developed and will be discussed.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to increase knowledge about ambulatory intra-aortic balloon pump patients.	• Intra-aortic balloon pump patient ambulation
The learner will be able describe at least one complication unique to these patient population.	Complication of ambulatory intra-aortic balloon pump patients.

Abstract Text:

Purpose: Heart failure is a chronic, debilitating disease that often progresses to end stage quickly when severe left ventricular dysfunction leads to alteration in organ perfusion even at rest. Approximately 500,000 people are diagnosed as having heart failure each year. Heart transplantation is the definitive treatment for patients with end-stage heart failure. The intraaortic balloon pump (IABP) is a treatment for end-stage heart failure patients not responsive to pharmacological therapy while they await heart transplantation. Traditional femoral artery placement of an IABP requires bedrest with its associated complications. An innovative approach for a percutaneously placed axillary-subclavian intraaortic balloon pump (PAIABP) developed by cardiologists in our hospital enables patients to be mobilized while awaiting transplant. We aimed to determine if PAIABP therapy enables pre-heart transplant patients to safely mobilize and create new nursing protocols for safe patient care management. **Methods:** This was a retrospective study of pre-heart-transplant PAIABP patients in the Coronary Intensive Care Unit (CICU) from 2007 to 2013 (n=45; 35 men, 10 women). Data are presented as mean (standard deviation) for continuous variables and number (percentage) for categorical variables. All analyses were performed with STATA version 13 (StataCorp, College Station, TX). **Results:** Patients were mobilized at 1.39 (± 1.41) days after PAIABP insertion. The number of times mobilized per day was 1.79 (± 2). PAIABP pre-transplant duration was 21.11 (± 25.40) days. Six patients died before receiving a heart transplant, unrelated to the PAIABP. Thirty-seven patients (82%) received a heart transplant. Two deteriorating PAIABP patients had a left ventricular assist device (LVAD) inserted and were later transplanted. PAIABP patients were 100% mobile when medically stable. Complication rates were as follows: bleeding from insertion site, 4%; ischemic complications, 7%; IABP-related infection, 2%. **Conclusion:** Pre-heart-transplant patients receiving PAIABP therapy can be safely and effectively mobilized. New nursing care protocols were developed for this procedure to take care of this patient population.