



Service Priorities and Programmes
Electronic Presentations

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A New Life with Advances Care Delivery — First Hong Kong Paediatric of Berlin Heart (EXCOR LVAD implantation) with Successful Bridge to Heart Transplantation

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Introduction

The Cardiothoracic Surgical Intensive Care Unit (CTSICU) of Queen Mary Hospital is the solo centre in Hong Kong capable of caring for complex paediatric patients receiving emergent cardiac surgical procedures and provides care for cardiothoracic surgery, heart, lung transplant. The Berlin Heart (EXCOR LVAD implantation) can temporarily assist or takeover failed cardiac (ventricular) function, by pumping blood to pulmonary circulation (right ventricular function) or systemic circulation (left ventricular function) via an external blood pump. However, heart transplantation still remains the end treatment for dilated cardiomyopathy. This is a case reviewed to describe our experience with the Berlin Heart (EXCOR LVAD implantation) as bridging to heart transplantation in paediatric patient with end stage cardiomyopathy.

Objectives

The Berlin Heart Nursing Care Team provides continuity and establishes a trusting relationship with the child and his family. Primary nurses are essential to the implementation of our comprehensive care planning process.

Methodology

A 14-year-old boy was suffered from myocarditis in 2012. 15 Nov 2012: He was performed CRT-D (Cardiac Resynchronization Therapy with Defibrillator). 6 June 2013: He admitted for signs of heart failure with symptomatic Dilated Cardiomyopathy - Functional class IIIb, LVEF ~20%; he was appeared to be dependent on inotrope, practically bedridden and only tolerated 10-20 steps walking. 24 July 2013: He was implanted 'Berlin Heart' - a left ventricular assist device. He was also on the emergency waiting list for heart transplantation. The Berlin Heart Nursing Care Team provided comprehensive caring program for the new task: including wound care, anti-coagulation treatment, blood pump monitoring for early complication management, and also provide psychological support care both to patient and parents.

He was offered heart transplantation luckily after 29 days with the Berlin Heart implantation. Finally, he can be discharged and back to home on 11 October 2013.

Result

In the totally 50 days stayed in ICU, the paediatric patient was successfully experienced Berlin Heart implantation and bridged to heart transplantation for his new life. The Berlin Heart Nursing Care Team reached the clear role responsibilities to streamline care coordination, in fostering patient-centered, goal-directed treatment.