50. Pulling Through Right Ventricular Dysfunction Post Continuous Flow Left Ventricular Assist Device Implantation as Destination Therapy in a 32-Year-Old Filipino Male With Advanced Heart Failure in a Tertiary Center in Metro Manila: A Case Report

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Body

A diagnosed dilated nonischemic cardiomyopathy since 2005 and with CRTD implanted in 2011 after surviving an out-of-hospital cardiac arrest, he presented with abdominal pain, low blood pressure and deranged liver function tests.

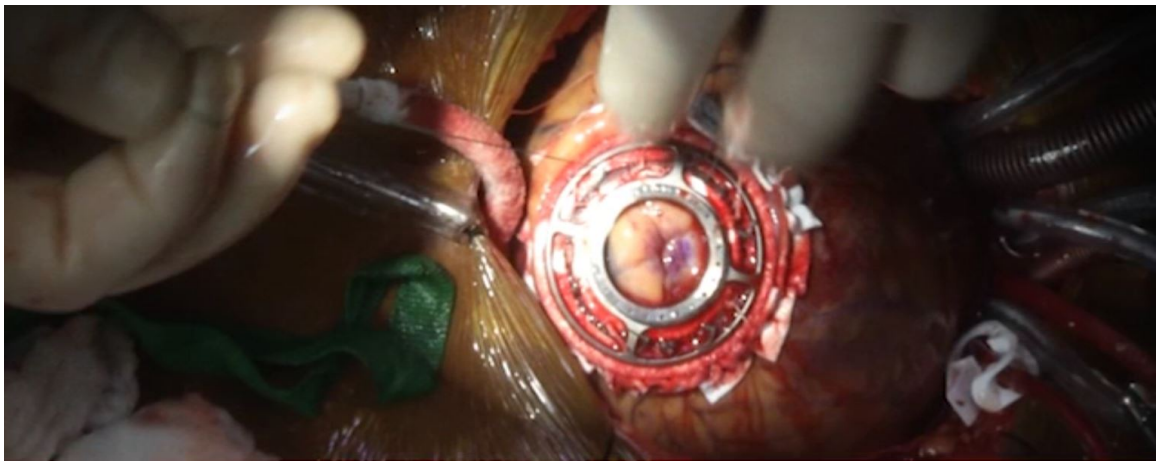
Abdominal CT scan revealed an inflamed appendix, medical management was elected. A TTE exhibit a severely dilated LV with eccentric hypertrophy, severe global hypokinesia, an EF of 21%, a dilated left atrium without thrombus and a dilated RV with inadequate systolic function and a severe MR. In the interim, he developed progressive symptoms, medications were maximized which required dobutamine support. He was referred to a multidisciplinary team and a heart failure specialist for consideration of LVAD as destination therapy.

He underwent an unremarkable LVAD implantation using “HeartMate 3TM”. Preoperative TEE displayed a markedly and severely dilated hypokinetic LV, an EF of 18%, a dilated RV with reduced systolic function, and severe MR. Post-operative TEE showed a “HeartMate3TM” device at the LV apex with good color flow in the inflow cannula, a smaller LV with improved systolic function, an improved LVEF of 41%, a smaller RV with improved systolic function, and a mild MR.

Around 3-4 hours post-op, device flow became persistently low. A stat TTE showed a large pericardial effusion. On re-exploration, ~100 ml clotted blood obstructing the drains was evacuated, device flow improved thereafter. He developed unstable VT ~12 hours post-op; stabilized by electric cardioversion, amiodarone infusion, and adjustment in CRTD settings.

In the interim, an increase in PI and power usage was noted. A repeat TTE demonstrated a small thrombus at the tip of the cannula with IVS flattening. Milrinone was resumed, enoxaparin was shifted to heparin drip, warfarin and diuretics were maximized. Later, oligoanuria with metabolic acidosis ensued, renal replacement therapy was initiated.

He was discharged on the 31st post-op day on minimal nighttime oxygen supplementation. Around 4 weeks post discharge, he was already off renal replacement therapy with resolution of congestive hepatopathy. He has greatly improved exercise tolerance and quality of life.

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