POSTERS

PREOPERATIVE PROPHYLACTIC USE OF LEVOSIMENDAN IN PATIENTS WITH SEVERELY DEPRESSED LEFT VENTRICLE

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BACKGROUND: The beneficial effects of the calcium sensitizer levosimendan have previously been demonstrated in patients undergoing coronary surgery (CABG) with left ventricular dysfunction however there are still questions regarding optimal dosing and timing of therapy. The goal of this study was to investigate the clinical outcomes of preoperative initiation of levosimendan in patients with left ventricular ejection fraction (LVEF) 30% or less during cardiac surgery.

METHODS: Eighty one patients with an EF < 30% or less than or equal 30% underwent CABG: other cardiac procedures in our center between 2005 and 2013. Myocardial viability was documented pre-operatively with thallium scintigraphy and/or PET scan. All patients received a 24 hour continuous levosimendan infusion of 0.1 mcg/kg/min starting 4 hours before the surgical procedure in the ICU. No loading dose was given. The infusion was prepared using 500 cc Dextrose and 12.5 mg levosimendan and was administered through a central venous catheter.

RESULTS: Forty six patients underwent concomitant surgery (56.8%). The 30-day mortality rate was 0%. In 5 patients (6.2%) IABP was used and in one patient (1.2%) ventricular assist device was inserted following surgery. The intubation time was 9.7±1.8 hours, intensive care unit stay 50.7±8.2 hours, total chest tube output 772±2463 cc, red blood cell transfusion 1.7±1.4 units, postoperative atrial fibrillation 21.0%, renal failure requiring dialysis 0%, and hospital stay was 10.4±5.9 days.

DISCUSSION: Preoperative, prophylactic levosimendan use is safe and seems to improve the outcomes of cardiac surgery in patients with severely depressed left ventricle function. Further randomized controlled studies are needed to show the benefit and cost effectiveness of this drug.

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LONG TERM RESULTS OF VALVE SPARING AORTIC ROOT REPLACEMENT: A SINGLE CENTER EXPERIENCE

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OBJECTIVE: The aim of this study is to investigate the early and midterm results of valve sparing aortic root replacements. The aortic pathology included either dissection or aneurysm formation. David operation was applied to all of these patients. Mean follow up period was 38.2±23 months. The results of early outcome and late follow up were reviewed.

RESULTS: Mean age and Euroscore (%) of the patients were 54.1±10 and 6.4±1.4. Seven of the patients (26.9) were female. Mean preoperative left ventricular ejection fraction was 58.8±7.2 %. Sixteen patients (61.5%) had additional cardiac procedure (6 coronary bypass surgery, 3 hemirecursive replacement, 1 aortic aorta replacement, 5 mitral valve repair, 1 left atrial ablation). No operative and hospital mortality was observed. Mean cross clamp time and cardiopulmonary bypass time was 114±34 and 137±41 minutes, mean drainage was 720±450 ml, mean intubation time was 9.1±3.8 hours, mean intensive care unit stay time was 28.1±17.9 hours. During the intensive care unit stay 10 patient (38.5%) needed inotropic support. There was 3 (11.5%) intensive care unit readmission and one (6.38%) hospital readmission observed. During the late follow up there was no mortality and no need for reoperation or reintervention.

CONCLUSIONS: Our study shows valve sparing aortic root replacement is safe and feasible with low mortality and morbidity rates.