

recovery from functional ischemic MR with isolated CABG is unlikely; in these patients, concomitant mitral valve repair should be considered.

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#### Serum Osteoprotegerin level and the extent of cardiovascular calcification in haemodialysis patients

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**Background:** Cardiovascular disease is the leading cause of death in chronic kidney disease and hemodialysis population. The mechanisms of vascular damage in this population are not fully explained by traditional cardiovascular risk factor. Osteoprotegerin (OPG) has been shown as an independent predictor of mortality in CKD patients and proposed as a potential biomarker for vascular calcification.

**Methods:** A total of 80 subjects (60 hemodialysis patients and 20-age and sex matched healthy control) were studied. Vascular and valvular calcification was measured using plain X-ray and transthoracic echocardiography. Circulating OPG was measured in addition to standard clinical biochemical analysis.

**Results:** Osteoprotegerin level showed significant difference between hemodialysis ( $5.4 \pm 2.8$  pmol/l) and controls ( $0.96 \pm 0.41$  pmol/l)  $P < 0.001$ . Vascular calcification detected by X-Ray and valvular calcification by echocardiography was statistically significant correlated with serum OPG level in hemodialysis patients with significant X-ray calcification score  $p = 0.003$  and overall valvular calcification with  $p$  value  $< 0.001$ .

**Conclusion:** There is strong positive relationship between osteoprotegerin and both vascular and valvular calcification in hemodialysis patients. This positive correlation may open the gate for routine estimation of this agent as a surrogate marker of cardiovascular calcification in hemodialysis patients.

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#### Should Jehovah's Witness patients be listed for heart transplantation?

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**Abstract:** This best evidence topic in Cardiac Surgery was written according to a structured protocol. The question addressed was: for [Jehovah's Witness patients with end-stage heart failure] can these patients undergo a [heart transplantation] without an increased rate of mortality. Altogether, 133 papers were found using the reported search strategy. Of those, 29 papers represented the best evidence to answer the clinical question. Five papers focusing on patients of the Jehovah's Witness (JW) faith who had end-stage heart failure were

published. Successful heart transplantation was performed in a total of seven patients without mortality, re-exploration or blood transfusion. One patient had left ventricular reduction surgery twice and another patient had bypass surgery several years after transplantation. Other successful organ transplantations were also reported, including lung, liver, kidney and pancreas in both adult and paediatric patients of the JW faith, with comparable mortality and morbidity to non-JW patients. A publication bias is likely; nevertheless, we conclude that although there are no large studies directly focused on heart transplantation in JW patients, a multidisciplinary team approach to such surgery can make it technically feasible and without an increased mortality risk in suitable candidates. Therefore, such patients may be considered for heart transplantation under selected and favourable circumstances.

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#### Single center experience of PDA stent In Saudi Arabia

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**Background:** Transcatheter PDA stenting is considered now as a modality to improve the pulmonary blood flow, as an alternative to surgical aortopulmonary shunt in selected patients who are suitable for the procedure.

**Method:** Between Jan 2005 to May 2011, 87 patients underwent PDA stenting in PSCC after full assessment by echocardiogram and angiogram 41 patients (47%) patient have PA & VSD 25 of them with 2 ventricles and the remaining 16 with single ventricle morphology, 22 (25%) patients have TOF, 24 patients (28%) have PA & IVS, 11 patients have Laser wire /RF perforation of the pulmonary valve same time. Median age is 8 days, median weight is 3.2 kg, and procedure is prograde or retrograde.

**Result:** Mean ventilatory support is 2 days, median hospital stay is 4 days, median saturation is 79%, median follow up is 45 mo, median fluoroscopy time is 17.6 min (7.7–43 min), 6 (6.8%) of them has NEC first few days post stenting, 3 (3.4%) has stent migration, 4 (4.6%) lost follow up, 2 (2.2%) deaths, comparing tomatching patients underwent MBT, the result is better.

**Conclusion:** We conclude that PDA stenting is a safe and alternative procedure surgical aortopulmonary shunt.

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#### Smoking is a more dangerous risk factor than metabolic syndrome in Egyptian patients with acute myocardial infarction

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The effect of metabolic syndrome (MS) and other risk factors of myocardial infarction (MI) are not consistent in all studies. Aim: To