Primary PCI (pPCI) is the treatment (R) of choice for ACS patients (pts) with STEMI; but it is unclear whether it has also benefits on morbidity and LV function (LVF). Remodeling especially in relation to the time delay to pPCI.

Two hundred and thirty-two patients treated for STEMI at KACC in 2010. One hundred and twenty-six patients were treated with pPCI with a hospital mortality of 2.3% compared to 11.3% for those treated medically.

We included 61 pts who received pPCI and had echo done at baseline T1 and within 3–6 months follow-up T2. Comparison was made for LV Ejection Fraction (LVEF), LV End Systolic Volume (LVESV) and LV End Diastolic Volume (LVEDV) using Student’s t-test.

Mean age was 59 ± 12.7 years. Forty-nine pts were males and 50% were diabetic and hypertensive. Door to balloon time (DTB) was 96 ± 30 min and time from pain to ER was 5 ± 6 h. During follow-up LVEF improved, EFT1 vs EFT2, (39 ± 8.49 vs 45.7 ± 8.48, P < 0.0001); LVEDV increased, LVEDV1 vs LVEDV2 (113 ± 32 vs 128 ± 40, P < 0.01); LVESV increased, LVESV1 vs LVESV2 (50 ± 25 vs 57 ± 27, P = 0.095, ns. There was no difference in the echo parameters whether the DTB time was <90 or >90 min and whether the call to ER time was <12 or >12 h.

pPCI is an effective R for STEMI pts. In our study cohort, the echo data shows that there is significant improvement in the EF during 3–6 months follow up but with no evidence of reverse remodeling. These changes were independent of the time delay to pPCI.

http://dx.doi:10.1016/j.jsha.2012.06.200

Effect of heart rate control on mortality and functional class in patients with heart failure
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Background: Resting heart rate (HR) is an independent predictor of all-cause and cardiovascular mortality in patients with left ventricular dysfunction. No studies have been conducted on the impact of HR on mortality and functional class in patients with heart failure (HF).

Objectives: Evaluate the effect of HR less than 70 beats per minute (bpm) on functional class and mortality among patients with left ventricular systolic HF.

Methodology: A retrospective, descriptive study, analyzed data on 868 eligible patients with HF and ejection fraction (EF) ≤ 40%, attending the Cardiovascular Disease Management Program, King Abdulaziz Cardiac Center, between April 2000 and October 2011. Patients were divided into group A (HR < 70 bpm) n = 433, and group B (HR ≥ 70 bpm) n = 435. New York Heart Association (NYHA) was used to assess functional capacity.

Last follow-up data, from an electronic database, was gathered in the planet. Findings did not support the hypothesis that HR is an independent predictor of all-cause mortality, in this patient population. Future prospective studies are strongly recommended.

http://dx.doi:10.1016/j.jsha.2012.06.201

The use of transannular patch in TOF: 10 years single centre experience & outcome
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Background: Trans-annular patch (TAP) repair of Tetralogy of Fallot (TOF) is correlated to poor late outcome, 30% need reoperation due to pulmonary regurgitation (PR). Severe stenosis at both pulmonary annulus and the right ventricle outflow impose the TAP. We highlight our retrospective analysis for the last 10 years.

Methods: One hundred and seventy patients, between 1999 and 2009, 140 (82%) “simple TOF” and 30 had associated anomalies; 11 (AVSD); 9 (DORV); 7 absent pulmonary Valve (APV); 3 (PA). This cohort was divided to TAP and None TAP. The analyzed variables. Age, Gender, weight, associated surgery to TAP PA Z value; pump time (TPT), cross clamp (Cx). Complications and time in ICU, hospital stay, morbidity and mortality.

Results: One hundred and twenty-two patients had TAP, 114 “simple TOF”, 6 DORV, 1 (AVSD), 1 (APV) and 1 (PA). Age (5 days~8 years), CX (118–38), TPT (110–64 mts), ICU (1–14), one patient (45 days). Hosp. stay (7–55 days). The amount of inotrop support after surgery was not TAP related, morbidity is minimal and mortality is 0%.

Conclusions: The Z score value of −2 for the PV annulus was the basic criteria for the TAP surgical repair, associated to right band muscle resection from the RVOT. The majority of our patients were over 6 months age. There was no effect of the type of patch used neither the CPB duration on the postoperative events. TAP in our practice is considered to be safe.

http://dx.doi:10.1016/j.jsha.2012.06.202

Remarkable reduction in cardiac mortality associated with the introduction of the Strategic Cardiac Hajj Interventional Program during the largest gathering in the planet
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Background: Religious pilgrimage, or Hajj, is a basic tenet of the Islamic doctrine. Each year approximately 3 million pilgrims congregate for up to 2 weeks in a