set to examine the differences in hospital management and short-term and long-term mortality of patient receiving furosemide bolus or infusion treatment for ADHF. This is a retrospective cohort study of 207 patients admitted to KKUH with ADHF. Clinical data, labs, in-hospital outcomes and long-term mortality data were collected through review of medical records and HEARTS registry database. We stratified our cohort into two groups; furosemide infusion and bolus groups. The mean age was 61.5 ± 13.87 years, and 66.2% were males. Approximately 42% had left ventricular ejection fraction LVEF < 40%. Use of intravenous infusions furosemide and boluses during admission was 42.86% and 57.14%, respectively. Compared to patient received bolus therapy, patients on infusion therapy had more renal impairment at presentation (26.4% vs. 12.5%, *p* = 0.033) and anemia (18.1% vs. 4.25, *p* = 0.006). They had less diabetes (30.6% vs. 38.5%, *p* = 0.006) and prior MI (18.1% vs. 32.3%, *p* = 0.006). Infusion group received higher total daily diuretic dose (*p* < 0.001), more Metolazone (19.4% vs. 3.1%, *p* = 0.002) and mechanical ventilation (11.1% vs. 3.1, *p* = 0.038). There was no difference in total urine output and renal outcomes between the two groups. The infusion group had longer hospital stay (15.40 ± 12.14 vs. 10.26 ± 6.74 days, *p* < 0.001). The long-term mortality up to 3 years was significantly higher among patient who received infusion therapy (27.78% vs. 9.38%, *p* = 0.002). ADHF patients who received furosemide infusion needed higher diuretic dose, had significantly longer hospital stay and higher long-term mortality.

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32. Ultra-fast, low high-pitch (flash) versus prospectively gated coronary computed tomography angiography

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Coronary computed tomography angiography (CTA) is increasingly being used for evaluation of coronary artery disease (CAD), but Radiation exposure still a major limitation of its use. We hypothesized that the high pitch spiral (FLASH) is superior to prospective (step and shoot (SAS)) ECG gating scan protocol, and associated with a low radiation exposure. The purpose of our study is to compare image quality and radiation exposure in a two group of patients undergoing CTA using a 256-slice dual source helical CT scanner with FLASH or SAS protocols. We randomized 162 patients referred for coronary CTA for either FLASH or SAS scanning protocols, subjective Image quality was graded based on a 4-point grading system (1: non diagnostic, 2: adequate, 3: good, 4: excellent). While Objective image quality was assessed using image signal, noise, and signal-to-noise ratio (SNR). The effective radiation dose was also estimated. The clinical and demographic characteristics of the patients in both groups were similar. We found that subjective image quality obtained with FLASH was superior to SAS (3.35 ± 0.6 vs. 2.82 ± 0.61 mSv; *p* < 0.001), image noise was not statistically different (25.0 ± 6.13 vs. 24.0 ± 6.8, *p* = 0.10), while the signal and SNR was significantly higher with FLASH compared to SAS (469 ± 116 vs. 397 ± 126, *p* < 0.001) and (21.9 ± 8.7 vs. 16.6 ± 7.7 mSv; *p* < 0.001) respectively. Radiation exposure was 62% lower in FLASH compared to SAS protocol, (1.9 ± 0.4 mSv vs. 5.12 ± 1.8 mSv; *p* < 0.001). Use of 256-slice CTA performed with FLASH protocol has better objective and subjective image quality, lower radiation exposure when compared with the use of prospective ECG gating.

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33. Moderate ischemic mitral regurgitation: Revascularization alone versus revascularization and mitral valve repair

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Ischemic mitral regurgitation (IMR) can be defined as mitral valve (MV) insufficiency caused by coronary artery disease and excluding other causes of mitral pathology as rheumatic, myxomatous, infectious, congenital, or connective tissue diseases, it usually occurs with right or circumflex coronary infarction that involves the posterior ventricular wall, posterior papillary muscle, and adjacent mitral annulus (1). The management of IMR represents a therapeutic challenge. Although most patients are treated medically, many patients are referred for surgery. Some authors claimed that revascularization alone is sufficient for managing those patients (3), whereas others have recommended revascularization combined with mitral valve repair (2). There is a general agreement that patients with mild mitral regurgure (1+) are treated with coronary artery bypass surgery (CABG) alone and those with severe (3+ or 4+) IMR should undergo mitral valve surgery at the time of CABG surgery. However, the importance of moderate IMR (2+) is still controversial.

A prospective controlled randomized study includes (60 patients with IHD undergoing CABG with ischemic mitral regurge aged from 40 to 65 years of both sexes). They will be divided into two groups of patients: Group I: 30 patients with IHD and moderate IMR undergoing on pump CABG for revascularization only. Group II: A 30 patients with IHD and moderate IMR undergoing on pump CABG for revascularization and mitral valve repair.

Study made from January, 2014 to August, 2015, at Medina Cardiac Centre that the presence of moderate (2+) ischaemic mitral regurgitation in ischaemic heart disease patients undergoing revascularization alone...
does not add any additional burden to the operative risk nor does it affect the immediate and early outcome of these patients. That revascularization alone can ameliorate moderate ischaemic mitral regurgitation in most patients postoperatively. This improvement is translated into an improvement in the functional class and the quality of life postoperatively there is no statistical difference between two groups. Also a procedure to address the mitral valve in moderate IMR should be considered in patients with a worse preoperative left ventricular profile.

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34. Cardiovascular complications among individuals with amphetamine-positive urine drug screening in King Abdulaziz Medical City, Riyadh

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Background: Amphetamine is the most commonly used illicit drug in Saudi Arabia (SA). Frequency and outcome of Amphetamine-related cardiovascular (CV) complications in Saudi Arabia have not been previously studied.

Aim: To determine the epidemiological aspects and clinical outcomes of the cardiovascular complications among individuals with Amphetamine-Positive Urine Drug Screening (APUDS) who were admitted to a large tertiary care facility in Riyadh, SA.

Methods: Retrospective, case-series review of consecutive individuals found to have APUDS and admitted to King Abdul-Aziz Medical City (KAMC) in Riyadh, SA between January 2006 through December 2013 inclusive. Cases with APUDS and concurrent positive cardiac biomarkers and/or admission to a cardiology unit were enrolled in the review. Demographic and clinical data were collected from electronic patient records. All data variables were managed and analyzed by Microsoft-Excel and IBM-SPSS software, version 20.

Results: A total of 7450 UDS were performed during the study period, out of which 720 (9.6%) were positive for Amphetamine. Forty-two admissions with APUDS were documented to have CV complications. All cases were males with a mean age of 41 ± 10 years and predominantly Saudis. Acute Coronary Syndrome (ACS) was the most frequent clinical presentation (n = 31, 73.8%), predominantly of ST Elevation Myocardial Infarction (STEMI) type. Other less frequent complications include myocardial infarcts and cardiomyopathy. Coronary procedures were performed in 30 cases. Average hospital stay was 7 days and in-hospital mortality was 7.2%.

Conclusions and Recommendations: ACS is the most frequent CV complication in the Amphetamine users. Amphetamine-related CV complications tend to occur at younger age and carry high risk of in-hospital mortality. UDS should be performed routinely for all individuals presenting with acute coronary syndrome or heart failure at young age. Confirmatory test should be routine available as a standard of care.

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Poster
HEART FAILURE AND CARDIOMYOPATHIES (DISEASE MANAGEMENT, QUALITY OF CARE, AND CLINICAL OUTCOMES)

35. With full antiplatelet and anticoagulant coverage: Still aortic root and left main coronary artery thrombosis can occur early post left ventricular assist device implantation

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We describe a case of 39 years old male underwent continuous flow LVAD implantation (HeartWare) HVAD as destination therapy (DT) for severe left ventricular dysfunction, moderate right ventricular dysfunction and severe pulmonary hypertension, presented 3rd day post-operatively with polymorphic ventricular tachycardia (VT storm) alternating with VF then aborted to brady-cardia with complete heart block. Coronary angiography revealed big LM coronary artery thrombus extended distally to mid LCX and mid LAD arteries and pedunculating into the aortic root proximally inspite of full coverage with antiplatelet and anticoagulant therapy. To our knowledge this is the 1st case documented with this early presentation post (HeartWare) HVAD device implantation as destination therapy (DT). We describe a case of 39 years old male underwent continuous flow LVAD implantation (HeartWare) HVAD as destination therapy (DT) for severe left ventricular dysfunction, moderate right ventricular dysfunction and severe pulmonary hypertension, presented 3rd day post-operatively with polymorphic ventricular tachycardia (VT storm) alternating with VF then aborted to brady-cardia with complete heart block. Coronary angiography revealed big LM coronary artery thrombus extended distally to mid LCX and mid LAD arteries and pedunculating into the aortic root proximally inspite of full coverage with antiplatelet and anticoagulant therapy. To our knowledge this is the 1st case documented with this early presentation post (HeartWare) HVAD device implantation as destination therapy (DT).

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