patients (76%) had TA type one. Two patients proved to have Di-George syndrome. Two patients had interrupted aortic arch. The median age and weight at surgery were 2.9 months (0.70–33.37 months) and 3.50 kg (2.70–9.80 kg), respectively. Eleven patients (58%) were operated at less than 3 months of age. Twelve patients (57%) had tricuspid truncal valve, 3 (20%) had quadricuspid truncal valve and 6 (29%) had bicuspid truncal valve. Nine (47%) patients had truncal valve stenosis and 9 (47%) had truncal valve insufficiency prior to surgery. 15 patient (71.4%) had no regurge post surgical repair. Early and late mortality were 4.7% each. Three patients (14%) required reintervention in the form of conduit balloon dilatation in one and conduit replacement with pulmonary artery plasty in two after two year of the first surgery. All of them are alive and well.

Conclusion: TA repair can be done in early infancy with low mortality. Careful follow up is mandatory as some patients may develop stenosis of the RV-PA conduit requiring reintervention.

doi:10.1016/j.jsha.2010.02.346

SHA 71. Additional role of 3D TEE in assessment of mitral valve (Mv) prior to intervention
Dr. Ahmad S. Omran, Consultant a, Alaa Mohamed, MD b, Ahmed A. Arifi, MD b
a Cardiology, Department of Cardiac Sciences
b FRCS

Objectives: In this study we present our experience in additional role of 3D TEE to evaluate MV prior to intervention.

Methods: From January 2009, 38 patients underwent 3D TEE to assess mitral valve. About 18 had rheumatic, 12 degenerative (myxomates) mitral valve disease, seven had ischemic MR and one patient for suspected endocarditis. 3D TEE was performed in addition to conventional 2D TEE imaging. In degenerative valve 3D had a great advantage to visualize en-face view of valve and appreciate all scallops and segments. 3D TEE could appreciate fusion of commissures and suitability for percutaneous balloon valvuloplasty in rheumatic. In ischemic MR, 3D was able to evaluate tethering of mitral leaflets and origin of MR jet.

Results: 3D TEE in all mitral valve cases gave additional information for decision making prior to intervention.

Conclusion: 3D TEE should be an essential tool to help planning the surgical technique to reconstruct and repair the faulty mitral valve.

Tracks: Adult Cardiology.

doi:10.1016/j.jsha.2010.02.347

SHA 72. Gender disparity in surgical management of coronary artery disease
Dr. Munir Ahmad, Associate Consultant, Dr. Ahmed A. Arifi MD, Rawdne Van Onselen, Abdulaziz Khaldi, Hani K. Najim
Department of Cardiac Sciences, King Abdulaziz Cardiac Center, King Abdulaziz Medical City, Riyadh, Saudi Arabia

Objectives: To investigate gender disparity as a risk factor in the surgical management and clinical outcome of coronary artery disease in Saudi population.

Methods: We carried out a retrospective analysis of 971 patients undergoing isolated Coronary Artery Bypass Grafting (CABG) at our institution between January 2005 and December 2008. Seven hundred and eighty-seven (81%) were males and 184 (19%) were females. We analyzed gender-based impact on clinical presentation, risk factors, surgical procedure and clinical outcome.

Results: The mean age was 60.0 years in males and 60.5 years in females. Associated co-morbidities were higher in females (Table 1) except for smoking. There was a tendency in females to present late and more acutely. The mean logistic euroscore was 3.94 in males and 5.51 in females ($p < 0.0003$).

Conclusion: Female gender is an independent predictor of adverse outcome after isolated CABG in our population due to significantly higher co-morbidities. This reflected into the smaller number of females undergoing coronary artery bypass surgery. Major effort needed to address the female associated higher cardiovascular risk factors and morbidities in Saudi Population.

Tracks: Cardiovascular Surgery.

doi:10.1016/j.jsha.2010.02.348

SHA 73. 3D Transesophgeal echocardiography: Assessment of morphology and function of prosthetic valves
Dr. Alaa A. Mohamed, Ahmed Omran, Ahmed A Arifi, Hani K. Najim, Abdulaziz Khaldi, Mouayed Zaibag
Cardiac Sciences, Department of Cardiac Sciences

Objectives: Replacement of diseased heart valves carries substantial risks unique to the implanted prosthetic device. These complications include prosthetic valve endocarditis (PVE), prosththetic valve thrombosis (PVT) and valve dehiscence. Early detection of prosthetic valve dysfunction (PVD) is crucial for the appropriate management planning. Hence, echocardiography remains the main modality for the diagnosis of prosthetic valve dysfunction. Real-time 3D transesophageal echocardiography (TEE), represents a significant advance in the field of echocardiography. It provides unique views for mitral valve prosthesis, from left atrium (LA) and left ventricular (LV) perspectives. It has been shown to give high quality 3D images of prosthetic valves in both the mitral and aortic positions. Therefore, we present our center experience with 3D TEE in assessing the morphology and function of prosthetic valves.

Methods: From October 2008 till October 2009, a total of 24 cases of suspected prosthetic valves dysfunction, 11 in the mitral position, seven in aortic position and six in both mitral and aortic positions. Of the 24 cases, 13 cases were suspected endocarditis, six valve obstruction and valve dehiscence in five cases. We have performed real-time 3D TEE and off line analysis using Q lab soft ware, which have increased the accuracy of the diagnosis and the management planning.

Results: Real-time 3D TEE was superior to 2D TEE in the diagnosis of prosthetic valve obstruction due to pannus formation or valve thrombosis, paravalvular leak and valve dehiscence.

Conclusion: 3D TEE, offers excellent and non conventional views for the prosthetic valves without the need for mentally reconstructing 2D images.

Tracks: Adult Cardiology.

doi:10.1016/j.jsha.2010.02.349