As periodontitis continues to have a high prevalence within the population and the fact that CVD remains as the major cause of human death in developed countries, in light of these associations we can legitimately, based on evidence, state that oral health has an influence on systemic health in general and in CVD in particular.

doi:10.1016/j.jsha.2011.02.037

SHA 037. Correlation between plasma pro-BNP levels and changes in heart failure manifestations, left ventricular size and function
Abdelfatah Elasfar, MD, PhD, Sameh Sayed, MD, PhD
Prince Salman Heart Center, King Fahad Medical City, Riyadh, Saudi Arabia
E-mail address: elasfar_egy@hotmail.com (A. Elasfar)

Objectives: The present study was designed to assess whether changes in NT-proBNP levels after mitral, aortic and double valve replacement reflect changes in HF manifestations including NYHA class and changes in LA size, LV size and LV functions.

Methods: The study population consisted of 24 patients (mean age: 55.3 ± 16.2 years, 58% were males) underwent surgical mitral valve Replacement (12 patients), Aortic valve replacement (8 patients) and combined mitral and aortic valve replacement (4 patients). Serial NT-proBNP measurements, transthoracic Echocardiography and (NYHA) class assessment were performed before and 6 months after surgery.

Results: The decrease in NT-proBNP was associated with decrease in LAD (r = 0.73, p < 0.002), LVESD (r = 0.65, p = 0.001), LVED (r = 0.53, p = 0.036), and increase in EF (r = −0.65, p = 0.001). Decreasing NT-proBNP was associated with improvement in NYHAFC.

Conclusion: NT-proBNP levels after mitral, aortic and double valve replacement correlate with changes in heart failure manifestations as well as changes in left atrial size and ventricular dimensions and function.

doi:10.1016/j.jsha.2011.02.038

SHA 038. Effectiveness of aminophylline prophylaxis of renal impairment after coronary angiography in patients with chronic renal insufficiency
Atoosheh Rohani, Vahid Akbari
Adult Cardiology, Sajjad Hospital, Yasuj, Iran
E-mail address: atooshe.rohani@gmail.com (A. Rohani)

Introduction: This study was done to investigate whether aminophylline reduces the incidence of contrast induced nephropathy (CIN) after coronary angioplasty.

Method: Sixty patients who had serum creatinine concentration of >1.3 mg/dl randomly received 250 mg IV aminophylline or placebo 30 min before coronary angioplasty. Serum creatinine and blood urea nitrogen were determined immediately before (base line) and at 24 and 48 h after administration of contrast medium.

Results: The primary end point was the incidence of CIN. The incidence of CIN was 20% in placebo group and 13.3% in aminophylline group; older age was significantly associated with CIN.

Conclusion: In this study, we could not demonstrate the prophylactic effect of a single infusion of 250 mg aminophylline, 30 min before administration of contrast media. A larger trial that incorporates the evaluation of clinically relevant outcomes is required to more adequately assess the role of aminophylline in CIN prevention.

doi:10.1016/j.jsha.2011.02.039

SHA 039. Meet the prefect stent
Bader Al Anesi
Cath Lab Technician, Prince Sultan Cardiac Center Hasa, Hofouf, Saudi Arabia
E-mail address: badcargo@yahoo.com

We cannot doubt the latest advances that have arrived in this era. With these developments along came complications. This presentation will present the best choice of stents in coronary artery diseased patients in a simple pictures fashion.


SHA 040. Study of angiographic features and risk factors among young Egyptian patients with IHD
Iman Esmat Ibrahim, Ahmad Onsy, Ramzy Elmawardy, Sherin Hegazy, Iman Esmat, Ahmad Onsy
Ain Shams University Hospitals, Cardiology, Cairo, Egypt
E-mail address: i.esmat@yahoo.com (I.E. Ibrahim)

Introduction: Young patients with CAD represent an important clinical group. Their clinical features, natural history and risk factors are distinctive. The study included 50 CAD patients post myocardial infarction (MI), 25 of them were below 40 years old (group I) and the other 25 were above 60 years (group II).

Objectives: To study different risk factors and their prevalence among young Egyptian patients, to study the angiographic features and the extent of coronary artery affection.

Methods: Patients were subjected to history taking, Clinical evaluation; ECG. Echocardiography; for estimation of ejection fraction; Coronary angiography: For assessment of the extent of coronary artery disease.

Results: The study of different risk factors showed that smoking was the most important risk factor in both groups. In the group I it was the sole risk factor in 40%, in group II the results showed that hypertension and diabetes mellitus were contiguous risk factors. Group II were found to have more than one risk factor associated with CAD. The results showed that inferior (STEMI) was more in group I while anterior STEMI was the more prevalent in group II. NSTEMI was more common in group II. There was no statistically significant difference between both groups in consideration of ejection fraction. Coronary angiographic features were statistically significant between both groups as (12%) of group I had normal coronary arteries while (40%) of group II had multi-vessel disease. The most common angiographic feature in group I was single vessel affection. Furthermore the (LAD) was the most commonly affected artery in both groups.

doi:10.1016/j.jsha.2011.02.041

SHA 041. Intra vascular ultrasound a niche versus routine application in the era of drug eluting stenting
Samih Lawand, MD, FRCPc, FACC
CCU Director, Consultant Interventional Cardiologist, Price Sultan Heart Center, King Fahad Medical City, Riyadh 11525, Saudi Arabia
E-mail addresses: samih_lawnd@yahoo.com, Samih.lawand@sha.org.sa
For many years Intra Vascular Ultrasound (IVUS) remained a tool of interest to those who primarily engaged in research. IVUS since then became a resource for true luminal and vessel wall histological definitions that provided invaluable details. However since the era of good old balloon angioplasty the role of IVUS remained limited to certain applications that included among others angiographic borderline lesions, limited dissections, ambiguous angiographic findings, calcifications and to a lesser extent thrombi.

The era of Drug Eluting Stenting (DES) brought additional challenges to modern Per-cutaneous Coronary Interventions (PCI) including issues of Stent sizes and deployment pressures, issues of Stent mal-apposition acute or acquired and Geographic miss. Many of these concerns remained under estimated until we were shocked with the scare of stent thrombosis early late or very late by 2006. The role of IVUS hence became much more contributing and set additional standards of Stent deployment techniques; Of particular importance, the various niche applications like Left Main, Bifurcational, Ostial Stenting and increasing off-label applications of long overlapping stents.

IVUS as well enhanced our ability to define causes of stent failures including stent fractures, other stent deformities and mal-appositions. More recently IVUS introduced forward imaging catheters that are likely to enhance the safety and success of Chronic Total Occlusion Interventions.

In addition to grey scale IVUS the introduction of Histo-Pathological simulations using Virtual Histology (VH) and more recently i-map technology is increasingly become a niche application for detecting vulnerable plaque providing better definition of Thin Cap Fibro Atheroma (TICFA) that emerged as potential cause of Acute Coronary Syndromes (ACS) and Stent failure when associated with geographic miss. With more outcome trials and emerging additional therapies VH-IVUS is likely to provide An emerging strategy of potential remedial approaches for Vulnerable plaque including lesion pacification whether by intensive medical therapy or possibly Stenting.


SHA 042. ECG an important diagnostic test in cases of Duchene muscular dystrophy
Muhammad Arif Khan, Abdulllah S, Al-Jarallah
Pediatric Cardiology, PSCH-KFMC, Riyadh, Saudi Arabia
E-mail address: dr.jarallah@gmail.com (A.S. Al-Jarallah)

Objective: Duchene muscular dystrophy (DMD) usually leads to dilated cardiomyopathy (DCM), congestive cardiac failure, arrhythmias, and sudden cardiac death. There are very few cases reported of Wolf Parkinson White Syndrome (WPW) associated with DMD. We present this rare case and to highlight the importance of ECG in cases of DMD.

Methods: 6 Years old boy k/c of DMD (Diagnosed by clinical features, CPK, LDH, DNA analysis) was referred to us for cardiac monitoring. We performed ECG, Echocardiography and 24-h Holter monitoring.

Results: ECG showed features of WPW syndrome in the form of short PR interval < 0.01 s (NV 0.09–0.16), positive delta wave in leads I, II, AVL, V4-6 and negative delta waves in leads AVR & V1, prolonged QRS duration > 0.125 s (NV 0.03–0.08). Twenty hour Holter was normal. Echo was unremarkable except for mild LV dilatation with LVEDd 4.5 cm (NV 2.7–4 cm, z-score 3), LVEDds 3.2 cm (NV 1.6–2.6 cm, z-score 4), and normal LV function FS 34% and EF 67%.

Conclusion: DMD is a progressive muscular dystrophy which leads to DCM which is one of cause of mortality in these patients. ECG should be the part of routine cardiac evaluation of all patients with DMD to detect its rare association of WPW syndrome.


SHA 043. Aneurysmal dilatation of the main pulmonary artery and pseudoaneurysm of the right pulmonary artery after arterial switch operation for TGA
Salem Deraz a, Ahmed Jamjoom b, Hysam Baho a, Arif Hussain b, Jameel Alata a, Amjad Kouatli a
a Pediatric Cardiology Section, Cardiovascular Department, King Faisal Specialist, Hospital and Research Center, Jeddah, Saudi Arabia
b Cardiothoracic Surgery Section, Cardiovascular Department, King Faisal Specialist, Hospital and Research Center, Jeddah, Saudi Arabia
E-mail address: drsdraz@hotmail.com (S. Deraz)

A case of congenital heart disease in the form dextroposition of great arteries, ventricular septal defect, patent ductus arteriosus and peripheral pulmonary stenosis (d-TGA, VSD, PDA and PPS). The case underwent arterial switch operation, VSD closure, PDA division and RPA augmentation. During postoperative follow up, it was found to have progressive MPA dilatation and both right and left pulmonary artery stenosis for which RPA stenting was done. During post catheterization follow up the case was found to have increased gradient across RPA and LPA and the RPA stent was found to be broken. The patient underwent restenting of RPA and stenting of LPA. Few months later the case was presented with severe respiratory distress, chest X-ray, Echocardiography and CT scan revealed huge aneurysm of the MPA and pseudoaneurysm of the RPA with the stent floating in it.

doi:10.1016/j.jsha.2011.02.044

SHA 044. Presentation of the first 100 patients with fetal echocardiography evaluation
Maged Mohamed El Samady, Shehla Jadoon, Farida Al Hazmi, Omar Galal
King Fahad Medical City, Prince Salman Heart Center, Riyadh, Saudi Arabia

Background: Introduction of fetal echocardiography into prenatal care has improved antenatal detection of congenital heart disease (CHD) which remains the most frequently overlooked lesions during prenatal ultrasound evaluation.

Objectives: At our institution we introduced fetal echocardiography clinic since March, 2009. This is a prospective study with analyzing data of the studied mothers showing the effect of this introduced service on the care of these patients.

Methodology: Between March 2009 and October 2010, a total of 100 mothers with high risk pregnancy referred from obstetrics department were examined at pediatric cardiology department. They can be divided according to cause of referral for fetal echocardiography into 3 groups: (1) Suggested abnormal fetal heart by initial scanning (by obstetricians), (2) Mothers with previous children with CHD, and (3) Mothers with systemic diseases associated with higher incidence of fetal CHD. The studies were repeated for some mothers, according to need.

Results: 100 mothers were evaluated. Indication for referral was: abnormal obstetric sonogram (n = 52), past history of CHD (n = 26), and maternal disease (n = 22). The gestational age at referral was 18–25 weeks in 51 mothers, 26–30 weeks in 22