diastolic dimension and Left ventricular end systolic dimension were not significantly different comparing baseline measurements of both groups but changed to be significantly higher starting from the 3rd month of follow up in group I than group II. Measures of systolic and early diastolic velocities at lateral site of the mitral annulus during the follow up of permanent pacing patients showed a significant reduction in the mean value of mitral annular systolic velocity in patients of both groups during follow up compared to the mean value at the beginning of the study.

Conclusion: TDI showed deterioration of right ventricular and left ventricular functions in VVI pacing when compared with DDD pacing.

Effect of high flow arteriovenous fistula on cardiac function in hemodialysis patients

T. Wahid EL-Said1, M. Ayman Saleh2, W. Mahmoud ElKilany2 and V. William Keddis2

From the 1Department of Internal Medicine, Ain Shams University and 2Cardiology Department, Ain Shams University
drtamer_elsaid@med.asu.edu.eg

Background: Vascular access for hemodialysis (HD) with an inappropriately high flow may underline the onset of high output cardiac failure. The aim of this study was to determine the prevalence of flow access (HFA) in chronic HD patients, and to determine its effect on cardiac functions.

Methods: This cross sectional study was conducted on 100 chronic hemodialysis patients through arteriovenous fistula (AVF). AVF flow (Qa) was assessed using Color Doppler ultrasonography. The study cohort was subdivided into 2 groups based on AVF flow: Group A (Non-HFA group with Qa < 2000 ml/min), and Group B (HFA group with Qa ≥ 2000 ml/min). Transthoracic echocardiography was performed for all patients to assess cardiac function.

Results: Prevalence of HFA was estimated at 24% of study population. Mean AVF Qa for group A was 958.63 ± 487.35, while mean AVF Qa for group B was 3430.13 ± 1256.28. The HFA group demonstrated a significant dilatation in LV and LA as compared to non-HFA group. A significantly lower LV ejection fraction was also observed with a mean of 57.32 ± 6.19 for group B as compared to 62.90 ± 5.76 for group A. A significant association between HFA group and high Qa/CO ratio (≥20%) was observed.

Conclusion: HFA is a prevalent HD vascular access problem. HFA was associated with dilated LV dimensions, impaired LV function. High Qa/CO ratio (≥20%) was an independent predictor of HOCF in our study population.

The role of copeptin in the early detection of patients with acute myocardial infarction and its relation to midterm prognosis

Z. Fathi Hemdan Elshaer, H. Mohammed Fakhry and K. Mohamed Said
Ziyadalshaer992@hotmail.com

Background: Rule-out of acute myocardial infarction (AMI) is a major challenge in Emergency Medicine. Due to the potential hazards of overseeing an evolving MI, most patients are subjected to 6–12 h observation on chest pain units (CPU) with the effect of an excellent prognosis at high costs (Pope et al., 2000; Goodacre et al., 2004).

Study: prospective observational study was conducted from the fifteenth February two thousand and fifteen to the fifteenth of September two thousand and fifteen in the Emergency Department of Ain-Shams University hospital. The study included forty patients with signs and symptoms of AMI, within the first 4 hours from onset of chest pain. Discharge diagnosis of STEMI was made in 23 patients (57%), and NSTEMI was 17 patients (42%), having an ST segment depression or had normal ECG. The study sample consisted of 40 patients their age ranged from 47 to 73 years with mean age (58.75 ± 6.04) years.; 25 patients (62.50%) were males and 15 patients (25.00%) were females. Eleven patient (27.50%) of all study patient were smokers.

Results: All patients at admission had high levels of ( above the cut off level): Copeptin, cTn I HL, CK-Total, CK-MB. Significant correlation was found Between copeptin at admission and heart rate and cTnIHL, and there was significant negative correlation with with LVEF%. Serum level of copeptin at discharge was a negatively correlated with LVEF% with highly- significant with P-value = 0.002 There was a non-significant difference in Serum level of copeptin at admission and at discharge, between STEMI and NSTEMI groups but it was higher in STEMI group. LVEF% was non –significant higher in NSTEMI. Major adverse cardiac events recorded in 3 patients. The serum level of copeptin at admission and at discharge they were higher in patients with MACE and this relation was very highly –significant with P-value < 0.001& P-value = 0.003 respectively. When comparing the MACE in STEMI and NSTEMI groups this relation was non-significant with P-value = 0.122.

Conclusion: Copeptin has a role in earlier and more accurate diagnosis of AMI when used after clinical work-up in combination with troponin with strong evidence supporting its prognostic value in AMI patients, when drawn at presentation.

Incidence of pericardial complications after percutaneous coronary intervention by echocardiography

M. Anwar Dawood Gobrial
Cardiomariam@yahoo.com

Background: Percutaneous complications in coronary intervention is a rare complication of this procedure, Incidence has been reported to be between 0.2% and 0.6 %. Some were reported during the era of balloon angioplasty alone, other studies have referred to intervention using newer devices including stents and rotational and directional atherectomy, also this complication was seen in the treatment of chronic occlusions, which are therefore not risk free procedures. expertise in the use of covered stents may provide a valuable rescue option for this serious complication.

Aim of the work: Screening of occurrence of acute pericardial complication such as pericarditis and pericardial effusion after percutaneous coronary angiography by echocardiography within 24-hours after the procedure.

Patients and methods: This study was conducted in cardiology department in Ain shams university hospital included 100 consecutive patient starting of September 2017 to study the incidence of pericardial complication after percutaneous coronary intervention by echocardiography within 24 hours.

Results: 100 patients (22 female, 78 male), age between 30-85. Only one patient had perforation during bifurcational pci by