

presence of CAD based on angio or documented MI. There were 11250 patients, we divided the cohort in to 2 Groups, namely, CAD + (Group 1) and CAD – (Group 2).

Results: Group-wise comparison showed the following **Results:** Mean age in Group I significantly higher. (56.36 Vs 52.95) $p \approx 0.0000$. There were significantly higher number of males in Group 1. (6125 Vs 2682) $p \approx 0.0000$. DM (41.5%Vs 21.8%) $p \approx 0.0000$. Smoking (13.1%Vs 5.7%) $p \approx 0.0000$ were significantly higher in Group 1. Mean HDL was significantly lower in Group 1. (39.42 Vs 41.75), $p \approx 0.0000$.

Stepwise logistic regression was done on 10,615 patients which showed the following.

From the logistic regression analysis, adjusted for TC, TC/HDL, HDL/LDL, HDL and HTN it is observed that:

CAD risk 3.037 times higher in males and 2.535 times higher in DM, 2.107 times higher in smokers, 1.029 times higher with each unit increase in Age. Not adjusting for Gender, analysis showed CAD risk is 2.458 times higher in DM and 2.751 times higher in smokers. Using Logistic regression model we found that in a 55 year old male, presence of diabetes increases the risk further by 18.82% and presence of smoking further increases by 9.15%.

Conclusion: 1) Traditional risk factors as age, DM, smoking have significant association with CAD. 02) Average lipoprotein levels were lower in our population.

High dose statin study

K.A. Sambasivam, S. Natarajan, P.R. Vydianathan, Rajpal K. Abhaichand, P.I.S. Chakravarthi, Bivin Wilson, J.K. Periasamy, Divya, V. Nithya

G.Kuppuswamy Naidu Memorial Hospital, Coimbatore, India

Background: There has been no Indian data on high dose statin in our country.

Aims: To assess the tolerability and safety (A 80) in high risk patients.

Methods: This is a retrospective observational study. 272 consecutive patients who were prescribed A80 and could be followed for 2 years formed the cohort. Data were retrieved from inpatient and outpatient records. Baseline demographics, initial diagnosis, interventional procedure done, list of concomitant medications, side effect profile, reason for dose reduction were all obtained and analysed.

Results: There were 238 males (87.5%) & 34 females (12.5%) Mean age was 56.4 year. HT was seen in 119 (43.75 %). DM in 109 (40.07%) Dyslipidemia in 114 (41.9 %) Tobacco use in 75 (27.57%) 236 (86.7%) patients presented with acute coronary syndrome. 204 (75 %) STEMI; 17 (6.25%) NSTEMI and 14 with unstable angina: (5.14%) 116 patients had VVD on CAG. Mean TC 186, HDL 36.01, LDL 119, TG 143; Mean reduction in LDL was 49.3% in six months. 83 (30.51%) patients had their dose reduction for various reasons. Maximal reduction was seen in first six months, [(49/83). 62%]. 35 patients had dose reduction due to financial reasons (43%). 29 patients had dose reduction without any reason in the case file (34%). 15 patients had dose reduction due to side effects (18.07%). Cough was seen in 4 (1.47%), Abdominal pain 2 (0.735%), Constipation in 3 (1.10%), Headache in 3 (1.10%) and Tiredness in 1, necessitating dose reduction. One each had SGPT and CK elevation requiring dose reduction. CK elevation more than 10 times was seen in one patient requiring stopping the statin.

Conclusion: High dose statin therapy (A80) is safe, tolerable with minimal side effects and should be prescribed to all deserving patients similar to our study group.

Our experience of CTO angioplasties

A.U. Amladi, S. Prabhu, N.O. Bansal

J.J. Hospital and Sir Grant Medical College, Mumbai, India

Background: Chronic total occlusion is defined as complete occlusion of the coronary vessel with TIMI O flow, present for an estimated duration of >3 months. Studies have found a frequency of 15–20% of CTO in angiographies. Chronic total occlusion PCI has experienced significant growth in the last few years with the adaptation and refinement of advanced techniques.

Methods: Over the past 3 years, more than 250 CTO PTCA were performed at our centre. We present an analysis of these CTO PTCA done at our centre. Subjects were analysed with respect to demographics, presentation, outcome and material used.

Results: Of the patients, males composed 72 % and females 28 % of patients. The predominant presentation was chronic stable angina (42%) followed by unstable angina (24%) and NSTEMI. The average LV function was 45%, while viability of myocardium was confirmed with stress thallium scans. The vessels involved were LAD: 38%, RCA: 42%, and LCX: 20%. In 82% procedures, TIMI III flow could be established without any complications. 12% procedures were unsuccessful, primarily due to inability to cross the lesion. Complications occurred in 15 % of CTO PTCA. Of these, the commonest was: flap formation (7%). Perforation occurred in 6% of patients, of which 2 required placement of a covered stent, while the others were managed by balloon occlusion. 2% patients required pericardial tapping. Contrast induced nephropathy occurred in 1 patient, while 4 patients succumbed in the periprocedural period. 64% of the lesions were negotiated using regular angioplasty wires (our workhorse FIELDER FC PTCA wires), while 36% required use of CTO wires.

Conclusion: CTO PTCA is one of the final frontiers of coronary interventions, our experience shows that CTO PTCA shows promising results, with complications rates that are progressively diminishing. We would like to highlight that a majority CTO PTCA were carried out using regular angioplasty wires with balloon support as opposed to CTO wires.

Role of erythrocytes in coronary artery disease

Janapati Ramakrishna, M. Jyotsna, D. Seshagiri Rao

NIZAMS Institute of Medical Sciences, Hyderabad, Telangana, India

Background: Association of Red blood cell distribution width (RDW) and coronary artery disease (CAD) is well established. But other erythrocyte parameters Mean corpuscular volume (MCV), Mean corpuscular Haemoglobin (MCH), Mean corpuscular haemoglobin concentration (MCHC) importance in pathogenesis of CAD is not studied.

Methods: Retrospective analysis of 765 patients' records (with complete Haemogram), who underwent coronary angiogram for suspected CAD in year 2013 at a tertiary care hospital were included in this study. Patients were grouped into angiography positive (AGP) (N=438), angiography negative (AGN) (N=327) based

on coronary angiogram. Patients with normal coronary angiogram and those with mild disease were grouped under AGN, and those requiring revascularization either by PCI or Coronary artery bypass grafting were grouped under AGP. Complete blood cell counts were analyzed with auto analyzers. Red cell parameters were compared between the two groups. Statistical analysis was performed with student T test.

Results: Of 765 patients, 238 were females 527 were males with mean age of 55.4 ± 11 years. Out of 765 coronary angiograms performed 438 patients were grouped under AGP and 327 patients were grouped under AGN. There was no significant difference between the AGP and AGN groups in mean Hemoglobin concentration ($p=0.09$), Red cell count ($p=0.06$), MCH ($p=0.8$), MCHC ($p=0.6$) but there was a statistically significant difference in MCV ($p=0.004$), total leukocyte count ($p=0.007$) and platelet count ($p=0.018$). A positive correlation was observed with MCV, TLC, Platelet count with coronary artery disease which were significantly higher in patients with proven coronary artery disease.

Conclusions: These findings suggest that altered Red blood cells may play a role in pathogenesis of coronary artery disease. This change in MCV is cause or effect is to studied.

Outcome of primary angioplasty in high volume tertiary care centre

Kala Jeethender Jain, Ramesh, Aditya, L.S.R. Krishna, O. Sai Satish

NIZAMS Institute of Medical Sciences, Hyderabad, India

Aims: To determine the outcome of primary PCI in high volume tertiary care centre.

Methods: We evaluated 137 patients who underwent primary PCI for acute STEMI at our institute from JAN 2013 to DEC 2103(1 year) retrospectively.

Results: A total of 137 patients were included in the study. The mean age of patients was 54.0 ± 11.5 years. On admission, 49 patients (35.8%) had diabetes, 52 patients (38%) had hypertension, 79 patients (58%) had acute AAMI, and 66 patients (48.7%) were smokers. Cardiogenic shock, complete heart block, ventricular fibrillation were encountered in 8 patients (5.7%), 10 patients (7.2%) and 12 patients (8.9%) respectively at hospital admission.

The mean door-to balloon time was 62.5 ± 15 minutes. Infarct related artery was –LAD (58%), LCX (12%), and RCA (30%) of patients. Multivessel disease was seen in 12 patients (6.4%). POBA was done in 5 patients (3.9%) and rest of the patients had stent implantation. The incidence of angiographic no reflow was seen in 5 patients (3.9%). The mean hospital stay was 5.2 ± 3.3 days. During hospital stay, the in hospital mortality was 5 patients (3.6%) out of which 4 patients (2.8%) died of a cardiac cause. Target vessel revascularization, major bleeding and minor bleeding were observed in 1(1.1%), 1(1.1%) and 3(2.2%) respectively. Acute stent thrombosis occurred in 1 patient (1.2%).

Conclusion: Primary PCI is an effective method in achieving complete revascularization of infarct related artery. Successful in hospital results depend not only on the experience of the operator, but also on the rapidity of reperfusion.

Relationship between Diabetes and Syndrome X in women with stable angina

T. Ganesh, M.S. Ravi, K. Meenakshi, D. Muthukumar, N. Swaminathan, G. Ravishanker, G. Justin Paul, C. Moorthy, G. Prathap Kumar, S. Venkatesan

Madras Medical College, Chennai, India

Background: Cardiac Syndrome X describes patients with angina, compatible findings with myocardial ischemia and normal coronary angiograms. It is an important clinical entity that should be distinguished from ischemic heart disease caused by obstructive coronary artery disease.

Aims: Several studies have already established the predominance of Syndrome X in female population. In our study, we analyse the prevalence of Syndrome X in female population and the significance of age, menopausal status, diabetes and hypertension with syndrome X.

Methods: This is a observational study conducted in the Department of Cardiology in a tertiary care centre in Chennai during the period of May to July 2014. A total of 50 female patients with anginal symptoms and evidence of myocardial ischemia in the form of positive treadmill test by Bruce protocol were included. They underwent diagnostic coronary angiogram. The pattern of coronary artery involvement was analysed.

Results: Out of the 50 female patients who underwent coronary angiograms, 20 (40%) patients had normal coronary arteries. Of these 20 patients, 16 (80%) were post-menopausal and 4 (20%) were pre-menopausal. Diabetic population among the patients with normal coronaries were 12 (60%), hypertensive non-diabetic population were 5 (25%) patients, non-diabetic non-hypertensive population were 3 (15%) patients. Average age among patients with normal coronary angiogram was 54 years, with average age being lower in diabetics (52 years) compared to non diabetics (58 years).

Conclusion: Cardiac syndrome X has a higher prevalence in female population in the post menopausal age group. Diabetic population was associated with greater incidence of syndrome X with a lower average age compared to non diabetic women. The analysis of diabetic and non-diabetic patients with cardiac syndrome X in this study has shown that diabetic population has a greater involvement of coronary microcirculation at an earlier age.

Does the antiplatelet regimen needs a change in CKD patients: a platelet inhibition study

K.V. Siva Krishna, M. Jyotsna, D. Seshagiri Rao, B. Srinivas, Rama Kumari, A. Siva Prasad, R.C. Barik, Lalitha

Nizams Institute of Medical Sciences, Hyderabad, India

Background: Higher coronary in-stent thrombosis and bleeding complications on anti-platelet agents are more common in Chronic Kidney Disease vs. non-Chronic Kidney Disease patients. Poor inhibition of platelet aggregation by anti-platelet agents predicts future cardiovascular events. Clinical practice guidelines are ambiguous about the use of these agents in Chronic Kidney Disease due to lack of controlled studies. The investigators