(1.6% vs 0) and ISR (0.73% vs 2.73%) rates were higher in the long stent group which showed a trend towards significance. The total stented length was higher in patients with events.

Conclusions: Angioplasty with a single long stent or overlapping stents are two suitable options for PCI in long lesions. Both strategies may be considered complementary to each other and not as mutually exclusive.

Contrast induced nephropathy in percutaneous coronary interventions – Risk prediction and clinical outcomes

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Background: Contrast-Induced Nephropathy (CIN) has been defined as a composite rise in the serum Cr level of more than 25% or 0.5 mg/dl or more from baseline, with a reduction in urine output to less than 0.5 ml/kg/hour for 6 hours after intravascular administration of iodinated contrast. In patients undergoing Percutaneous Coronary intervention (PCI), cases of CIN leading to dialysis predicts catastrophic outcomes. Transient rises in the creatinine (Cr) level relate directly to longer intensive care unit and hospital ward stays translating to differences in mortality after PCI.

Methods: The study was conducted after getting the approval from the ethical committee of Narayana Medical College. All patients taken up for a PCI over a period of 1 year for any indication were included in the study irrespective of the diagnosis & for whom a minimum of 1 follow-up visit post-discharge was available. Known patients of chronic kidney disease, irrespective of whether they were already on dialysis treatment or not & patients who were lost to follow up after discharge were excluded from the study.

Results: A total of 345 patients were included in the final analysis. 65 (18.84%) patients developed CIN as per the standard definition. 280 (80.16%) patients did not develop CIN. These 2 groups were compared with each other for various parameters to analyze the various correlations.

Conclusion: The predictors of CIN included elderly age, history of smoking, history of non-steroidal anti-inflammatory drug (NSAID) abuse, elevated C-reactive protein (CRP) levels, use of Gp IIb/IIIa inhibitors peri-procedurally, presence of congestive cardiac failure (CCF) & post-procedure blood transfusion. Mortality was higher in the CIN group with the CIN risk score being higher in the patients who developed CIN. The patients who developed CIN had a significant loss in residual renal function at follow-up as evaluated by estimated Glomerular Filtration Rate (eGFR).

Outcome of intravascular ultrasound guided percutaneous transluminal coronary angioplasty at the end of one year

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Background: Intravascular ultrasound (IVUS) is an important adjunct to angiography, providing new insights in the diagnosis and therapy for coronary disease. Procedure related factors are important contributor of both restenosis and thrombosis after DES implantation. Stent under expansion is most important factor in DES failure.

Methods: This is retrospective single center observational study was to evaluate impact of intravascular ultrasound (IVUS)-guided percutaneous transluminal coronary angioplasty (PTCA) for the treatment coronary lesions. We retrospectively evaluated a 45 lesions in 30 patients treated with IVUS-guided PTCA. The results were compared with those of angiographic stenting in a matched group of patients. Control population was matched in terms risk factors, diagnosis, length of lesion, vessel anatomy.

The primary end points were the postprocedure measure of minimal stent dimensions by angiography (diameter) and ultrasound (area, minimal diameter). The secondary end point was independently adjudicated major cardiac events (death, MI, and TVR) determined by follow-up at 12 months.

Results: The IVUS-guided group had a larger minimal lumen diameter (3.0±0.4 versus 2.7±0.5 mm, P<0.001) by quantitative coronary angiography and a larger minimal stent area (MSA) (7.78±1.72 versus 7.06±2.13 mm²) by quantitative coronary ultrasound. Target vessel revascularization, defined as clinically driven repeat intervention or surgical therapy of the index vessel at 12 month-follow-up, occurred significantly less frequently in the IVUS-guided group (8.5% versus 15.3%, P<0.05; relative reduction of 44%). The average acute gain achieved was 1.84±0.77 mm in IVUS group, and 1.50±0.44 mm in angiography group statistically significant (P<0.001). One year follow-up MACE rates were lower in the IVUS group than in the Angiography group (20% vs. 39%) [p<0.05].

Conclusion: IVUS guidance for the treatment of coronary lesions is associated with good acute outcome. IVUS guidance achieved significantly larger minimal stent dimensions than that used angiographic guidance alone. This difference was associated with a 44% lower rate of TVR but no difference in mortality or MI. Angiographic restenosis and follow-up MACE rates were significantly lower with IVUS group.

Use of Absorb™ bioresorbable vascular scaffold (BVS) during transradial primary angioplasty in STEMI – A multicenter experience

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Background: Randomized controlled trials established the role of BVS in the management of coronary artery disease (CAD). Data of BVS in stable CAD and non ST elevation myocardial infarction/acute coronary syndrome is convincing. There is limited data of usage of BVS in STE elevation myocardial infarction (STEMI) management during transradial primary PCI. We report our initial experience of usage of BVS in this clinical setting.

Methods: All patients of STEMI who were treated between June 2013 and 2014 with BVS were studied. STEMI was diagnosed as per standard criteria. All patients were pre treated with chewable aspirin 150 mg to 325 mg, ticagrelor 180 mg and atorvastatin 80 mg. Patients were shifted directly to catch lab from the ER. Radial access was obtained. After the diagnostic angiogram, the infract related artery was engaged with guiding catheter. The lesions were crossed and predilated. The scaffolds were deployed at 6 to 12 atm pressure. The scaffolds were postdilated with
noncompliant balloons up to 14 atm using either 1:1 balloon size or 0.5 mm oversized balloons. All patients also received injection bivalirudin.

**Results:** 14 patients were treated with 16 BVS. The culprit vessels were LAD-7, LCX-2 and RCA-5. Two patients with LAD disease were received over lapping scaffolds. The median door to balloon time was 45±11 minutes. TIMI 3 flow was achieved in all. There was no in hospital MACE. One patient with overlapping BVS had LVF. Check angio showed patient scaffold. The mean LVEF was 37±8 at pre discharge, all patients were discharged between 3rd and 4th day. At median follow up of 11 months, all patent are doing well.

**Conclusion:** From this initial experience of BVS usage during transradial primary angioplasty in acute myocardial infarction, we conclude that the use of BVS in the setting is feasible and safe at short term follow up. RCTs to confirm these results are warranted.

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**A randomized comparison of Taxus Element Vs. Xience Prime in Indian patients with diabetes mellitus (TUXEDO India)**

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**Background:** The choice of DES in diabetic patients is still a matter of debate, data from registries and subset analyses of trials comparing paclitaxel eluting stents vs. sirolimus and everolimus stents have conflicting results. There is no adequately powered study to answer this question.

**Methods:** TUXEDO India is an Investigator initiated randomized study comparing Paclitaxel eluting “Taxus Element” with Everolimus eluting “Xience Prime” in patients with diabetes mellitus on medical treatment. The inclusion criteria include multi vessel disease requiring up to 3 stents in different lesions. Stent lengths up to 38 mms are allowed to be used. Based upon previous data, a total of 1830 patients have been included in the study. The primary end point is target vessel failure (Cardiac death, MI and target vessel revascularization) at 1 year. Stent thrombosis is taken as a secondary end point. The enrolment for the study is completed with an ongoing follow up.

**Results:** Demographic data of the enrolled patients revealed mean age of 58.3±9.2 years. Males constituted 75.3% and Insulin requiring diabetics were 39.6%. ACC was present in 74.9%. Average number of stents used was 1.3±0.57 mm per patient.

**Conclusions:** The inclusion of 39.6% (insulin dependant) high risk diabetic patients with implantation of long stents in a multi vessel scenario makes it a unique population. The details of the base line demographic features of this ongoing study comparing paclixtaxel and everolimus-eluting stents will be interesting.

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**Daycare percutaneous coronary intervention in Indian set up – Is it feasible? An analysis**

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**Objectives:** This study was carried out to observe the outcomes of patients discharged the day of percutaneous coronary intervention (PCI) by analyzing the data from a single center, large, multi-operator registry of interventions.

**Background:** Same day discharge is most likely a safer option after PCI on low-risk stable patients. It has been a constant challenge for hospital authority and health care providers to standardize the length of stay after PCI. The main drawbacks of most of the previously reported studies regarding same day discharge are the strict inclusion criteria and hence they do not truly delineate a real world situation.

**Methods:** We analyzed the outcomes of consecutive same day discharge in 54 of 376 patients who underwent elective PCI done through femoral route without any complication. All patients were hemodynamically stable with normal left ventricular ejection fraction, and coronary angiography revealed single vessel disease. All patients were kept under close observation through telephonically for first 48 hours, and also instructed to take usual dose of anticoagulant (low molecular weight heparin) at home for one day. Composite end point included 30-day major adverse cardiac events (MACE) and bleeding/vascular complications.

**Results:** The mean age of the study population was 47.3±11.7 years with 19.7% aged over 65 years. 60% patients received bolus dosage of glycoprotein IIb/IIIa inhibitor in catheterization laboratory. Clinical and angiographic success was noted in 98.3% of all PCIs. The average length-of-stay following PCI was 6±1.2 hours. MACE occurred in 1 patient (1.5%) and vascular/bleeding complications in the form of minor bleeding in 1 patient (0.85%) and pseudoaneurysm in 2 patients (3%).

**Conclusions:** When properly selected, with strict adherence to the pre-set protocol, same-day discharge after uncomplicated elective PCI is safe despite using femoral access in a wide spectrum of patients.

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**Feasibility and long term results of Lt Main PCI in a peripheral centre**

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**Background:** Interventional cardiologist occasionally comes across patients with critical Lm lesions who are either hemodynamically compromised or have severe angina, ECG changes warranting urgent PCI especially if urgent CABG cannot be done. This is particularly challenging in peripheral centre with limited resources and facilities.

**Methods and Results:** A total of 27 patients underwent Left Main PTCA at Ashwini Sahakari Rugnalaya, Solapur, a semi-urban area of Maharashtra. 1st Lt Main PTCA was done on 16/02/2008 and last on 01/04/2014. Initially left main PTCA was done only as a rescue life saving or as primary intervention in STEMI. Subsequently it was also done as elective procedure when anatomy was suitable. Out of 27, 19 were males and 8 females, age ranged from 35years to 91years with mean age of 60.4. Left main as rescue procedure was done in 17 patients when immediately after CAG patient had either severe chest pain, haemodynamic compromise and in 1 patient dissection of left main. In 7 patients left main was done as PAMI for STEMI and in 2 patients it was an elective procedure. IABP was not used in any pt.


No of stents: Left main alone – 04, Left main with crossover to LAD single stent – 14, Left main with LAD separate stents – 02, Left main with CX – 02, Left main with RCA – 01, Left main with...