recurring, debilitating abdominal pain, usually occurring within the first hour after meals. Hence its been also referred to as intestinal angina. This is due to insufficient visceral blood flow during periods of heightened intestinal demands. Therapeutic options include surgical reconstruction and percutaneous transluminal angioplasty (PTA) with or without stent placement. PTA has become an alternative to surgery in many high risk surgical patients. The procedural and clinical success rate of PTA has been reported to be greater than 80% and 75%, respectively. moto et al. reported from his case series comparing PTA with and without stenting, that PTA with stenting was associated with lower incidence of complications and a higher technical and clinical success rate.

We report our patient who was initially diagnosed as a case of acid peptic disease (APD) and later as postprandial angina secondary to coronary ischemia. Our patient actually had SMA stenosis and exclusion presenting as APD and postprandial angina. Patient successfully underwent PTA with stenting with dramatic improvement. His 2 yrs follow-up with upper GI endoscopy showed normal gastroduodenal mucosa.

**Conclusion:** SMA stenosis, a rare condition, presents as recurrent abdominal pain with postprandial angina, should be carefully considered because of its serious clinical consequences. PTA with stenting has been considered as a safe and effective treatment alternative to surgery.

**Comparing efficacy of antiplatelet agents in PCI patients heterozygous to CYP2C19*2/*3 mutations**

S. Ramesh*, S. Socrates, M.A. Rajasekar, N. Senguttuvan

Associate Professor, A1, Red Block, Casa Grande Tulips Apartments, Ganesh Avenue, Pallikaranai, Chennai 600100, India

**Introduction:** Clopidogrel is the most common, cost effective medication available for patients undergoing PCI. But variations in CYP2C19 has been associated in decreased metabolism of this drug leading to MACE. The other anti-platelet drugs considered in such situations include Prasugrel and Ticagrelor, which are highly efficient when compared to Clopidogrel but are sometimes associated with bleeding and Ticagrelor is expensive. CYP2C19*2/*3 is the most common, loss of function mutation in this gene, which reduces its activity and hence low metabolism of Clopidogrel. Patients heterozygous to any of these SNPs have to be put on alternative treatment regime, which included Prasugrel and Ticagrelor or higher doses of Clopidogrel.

**Objective:** To evaluate the efficiency of Clopidogrel (75 mg), Prasugrel (10 mg) and Ticagrelor (90 mg) in PCI patients heterozygous for CYP2C19*2/*3

**Methodology:** A total of 20 patients who have undergone PCI and heterozygous for CYP2C19*2 and CYP2C19*3 variations were recruited from Sri Balaji Hospital, Chrompet after obtaining written informed consent. The patients were randomly categorized into 3 regimens: double dose Clopidogrel (75 mg), Prasugrel (10 mg), and Ticagrelor (90 mg). Each group has 8, 8, and 4 patients, respectively. The efficacy of these drugs was evaluated by platelet response array using FACS. Based on platelet reactivity index (PRI), they were classified as normal (<50), borderline, or poor (>50) response.

**Results:** Of the 8 patients who had Clopidogrel (75 mg), two had borderline response and the rest 6 had poor response, and of the 8 patients, who were on Prasugrel (10 mg), two had borderline and 6 had good response. The 4 patients on Ticagrelor had good response.

**Conclusion:** Evaluation of the efficacy of these three anti-platelet drugs in the heterozygous group of CYP2C19*2/*3 showed Ticagrelor is highly efficient in preventing platelet aggregation followed by Prasugrel in our cohort. Patients on double dose Clopidogrel have high residual platelet reactivity.

**Incidence of mace with genotype test guided antiplatelet treatment strategy after PCI**

S. Ramesh*, S. Socrates, M.A. Rajasekar, N. Senguttuvan

Department of Cardiology, Sree Balaji Medical College, No. 7, CLC Works Road, Chrompet, Chennai 600044, India

**Back ground:** Clopidogrel is an prodrug that requires hepatic bioactivation by several enzymes including CYP2C19. Clopidogrel, which is currently the mainstay of management after PCI, fails in certain group of individuals, as they are unable to metabolize the drug. Variations in the gene CYP2C19 has been associated with poor metabolism of clopidogrel and hence mace

**Methods:** A total of 151 patients who have undergone PCI were recruited from our institution after obtaining written informed consent. Salivary samples from patients were genotyped for CYP2C19*2, CYP2C19*3 variations by sequencing method (GAAP X METHOD). Dual antiplatelets were given based on genotype information.

**Results:** Based on their genotyping result for CYP2C19*2 and CYP2C19*3, patients were categorized into 3 groups – normal (GG,GG), intermediate (AG), and poor (homozygous variant AA). Percentage of individuals in each group was 29, 52, and 19, respectively. Poor metabolizers were given newer agents (Prasugrel or Ticagrelor). Intermediate metabolizers were given newer agents or double dose clopidogrel. Out of 151 patients followed-up for 6 months, only 3 patients (1.5%) were admitted with myocardial infarction (troponin positive). They all underwent CAG – one patient had stent thrombosis. He was not compliant with antiplatelets. Other two had lesions in non-culprit vessels with patent stents.

**Conclusion:** Major adverse coronary events after PCI were brought down significantly by genotyping individuals. Genotype may be relevant for choosing appropriate dual antiplatelet therapy in patients undergoing PCI.

**Direct deployment of Absorb™ bioresorbable vascular scaffold (BVS) without predilatation in the culprit lesion during trans-radial primary angioplasty – Direct Absorb pilot study**

T. Ghose*, S. Yadav, B. Kukreti, K. Arora

Paras Hospitals, Gurgaon, India

Absorb biodegradable biovascular scaffold (BVS) is a relatively new device in the management of coronary artery disease. Initially, BVS was studied in chronic stable lesions. There is emerging data on its usage in acute coronary syndrome lesion. The manufacturer advocates 5 Fs during deployment of the scaffold (proper sizing, predilatation, pay attention to expansion limit, post dilation with
noncompliant (NC) balloon, and prescribe DAPT). We hypothesized that in selected ST elevation myocardial infarction (STEMI) lesions it would be possible to do away with predilation (one of the Ps) and this would be associated with reduced slow flow. Our protocol in STEMI is to pre-treat these patients with aspirin chewable (325 mg) half tablet, if the patient is on aspirin, full tablet, if the patient is not on aspirin plus prasugrel 60 mg or clopidogrel 300 mg or ticagrelor 90 mg 2 tabs in the ER. IV access is obtained. After heparin 5000 IV is administered, the patients are shifted to the cath lab. Right radial access is obtained. 6F sheath is placed. In anterior wall MI, we proceed with the XB guiding catheter directly (as per Direct study protocol). The patients are given Inj. Bivaluridin bolus followed by infusion. Heparin plus GP IIb inhibitors are used in patients who do not receive bivaluridin. 2 orthogonal views of the infarct related artery are obtained. The lesion is crossed and thrombectomy is done. For direct BVS deployment, patient has to satisfy the following criteria: Age < 55 years, no fluoroscopic calcium, no history of prior angina. All patients received intracoronary (I/C) nikorandil 2 mg and NTG (100 mcg) as per the hemodynamic status. The Scaffold length was chosen as normal to normal vascular segment. The diameter of the BVS was upsized by 0.5 mm then the visual estimation of the vessel size. The BVS was deployed very gradually up to (maximum) 12 atm pressure. I/C NTG/Nikorandil was repeated. The scaffolds were post-dilated with noncompliant balloon, over-sizing upto 0.5 mm-more the scaffold size matching the vessel size. After completion of the BVS deployment, the RCA angiogram was obtained in anterior wall MI. In inferior wall, MI prior angiogram of left coronary artery was done, then RCA was hooked, and the procedure was completed. Between Jan 2013 to July 2015, 52 scaffolds were deployed in various lesions of STEMI. 13 scaffolds were deployed without pre-dilatations of STEMI lesion. The mean ages of the patients were 36-85 years. 10 were male, diabetes (3 patients), smoking (3 patients), hyperlipidemia (7 patients), obesity (3 patients) were the coexisting risk factors. The total ischemia time was 180 ± 75.5 min. The door to balloon time was 35 ± 14.5 min. Pre-procedure TIMI flow was TIMI 0-7 patients TIMI I-1, TIMI II-2, and TIMI III-3 patients. Post-procedure flow was TIMI II-1, patient TIMI III-2 patients. LVEF was 55 ± 12% during acute phase, which improved to 42 ± 12% at 3 months. All the patients are found to be in NYHA class I at 10 months of follow-up. From this pilot project, we conclude that in selected STEMI lesions it is feasible to deploy BVS without lesion pre-dilatation. This is associated with good in hospital and intermediate term clinical outcome. A randomized controlled trial is warranted.

**Percutaneous revascularization of sole arch artery for severe cerebral ischemia resulting from Takayasu arteritis**

Varun Vishwas Nivargi*, Manuel Durairaj, C.N. Makhale, M.S. Hiremath, Jaibharat Bhalke, Salil Vaidya, Hammad Mommrin
Ruby Hall Clinic, Pune, India

**Background:** Non-specific aortoarteritis (NSAA)/Takayasu arteritis (TA) is an inflammatory arteriopathy common in young Asian females affecting the aorta and its branches leading to significant ischemic events. Progressive NSAA may lead to obstructive lesions of all arch vessels leading to disabling neurologic symptoms. There is limited experience with endovascular revascularization in this situation. We report results of stent-supported angioplasty to stenosis of sole surviving arch vessel performed in our center.

**Methods:** Angioplasty and stent placement were performed in 8 consecutive patients with TA (age, 11–42 years; mean, 28.3 ± 4.1 y) with cerebrovascular symptoms caused by severe stenotic lesions of supraaortic (i.e., carotid, vertebral, and brachiocephalic) arteries from May 2010 to May 2013.

**Result:** No immediate procedure-related complication or neurologic deficits occurred. The symptoms improved in all patients. On follow-up (mean, 25 ± 7 months; range, 3–49 months), 6 patients were asymptomatic and two patients had recurrence of neurologic symptoms. These patients had in-stent restenosis of the carotid artery.

**Conclusion:** Stent-supported angioplasty of a sole supraaortic artery is safe and feasible and provides good symptomatic relief in patients with advanced NSAA.

**Procedural, in-hospital and one year outcome of success versus failure percutaneous coronary intervention in chronic total occlusions**

Vishwanath Hesarur*, Suresh Patted, Prabhu C. Halkatti
OPD No. 29, Department of Cardiology, KLES Hospital and MRC, Nehrunagar, Belgaum, India

**Introduction:** Percutaneous coronary intervention has become common in the management strategy of patients with chronic total occlusion. However, despite improving techniques for opening chronic total occlusions, the benefit of successful recanalization of the artery remains unclear.

**Objectives:** The purpose of this study was to know the procedural success rates, guidewire strategies, in-hospital and one year outcome of patients undergoing percutaneous coronary intervention in chronic total occlusion.

**Methods:** CTO-PCI were attempted in 101 consecutive patients. 79 cases with successful PCI and 22 cases with unsuccessful PCI were enrolled in the study from January 2013 to February 2013. Chronic total occlusion was defined as thrombolysis in myocardial infarction flow grade 0-1 and duration > 3 months. Detailed baseline clinical, angiographic, procedural, and outcome data were collected and compared success versus failed procedures.

**Results:** Procedural success was seen in 78% patients (79 of 101). Patients with unsuccessful PCI compared to successful PCI were mainly male (81.01% vs. 72.3%; p < 0.02), had a higher incidence of diabetes mellitus (31.1% vs. 20.9%; p < 0.04) and hypertension (53.3% vs. 42.3%; p < 0.04). Most patients in successful group had single vessel disease (63.4% vs. 46.7%; p < 0.001) and less three-vessel disease (11.8% vs. 22.8%) compared to unsuccessful group. In-hospital MACE was insignificantly higher in unsuccessful PCI (33.1% vs. 0%). Unsuccessful PCI was significantly associated with higher rate of one year MACE (61% vs. 18.1%, p = 0.01), especially revascularization (33.3% vs. 12.2%, p = 0.02).

**Conclusions:** Patients with successful recanalization of CTO with PCI have better symptom relief, better clinical outcome, improved left ventricular function and better long-term survival compared with patients in whom the attempt to recanalize CTO has failed.

**Rare case of intimal fibromuscular dysplasia treated with percutaneous intervention**

Amit Bharadiya*, P.C. Rath
Room No. 105, Nehal Chambers, Opposite to Apollo Hospital, Film Nagar, India

In the general hypertensive population, renal artery stenosis (RAS) is the most common secondary cause of hypertension and is