	Women N=59	Men N=28	P value
Age (mean)	54.96±9.71	54.53±9.71	NS
Baseline transit time (BTT) (sec)	0.82±0.50	1.31±0.54	<0.001
Hyperemic transit time (HTT) (sec)	0.27±0.13	0.41±0.29	<0.001
Pressure (aortic)	85.98±14.22	79.71±13.11	0.05
Pressure (distal)	78.9±15.10	71.04±13.27	0.02
Fractional Flow Reserve	0.92±0.05	0.89±0.05	0.01
Coronary Flow Reserve (HTT/BTT)	3.07±1.68	3.94±2.01	0.04
IMR (HTT X Pressure (distal))	21±10.64	29.42±24.28	0.02
Abnormal IMR (%)	16 (27)	10 (35)	NS
Slow Coronary Flow Phenomena	4 (7)	12 (43)	<0.001

CRT-200.07

Impact Of Ranolazine On Coronary Microvascular Function (MICRO Study)

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BACKGROUND Patients with angina and coronary microvascular dysfunction (CMVD) in the absence of obstructive epicardial coronary artery disease (CAD) or structural heart disease (Type 1 CMVD) remain without evidence based treatment options. Ranolazine has been shown to reduce frequency of angina episodes among patients with Type 1 CMVD.

OBJECTIVE of this pilot project is to assess the impact of ranolazine on CMVD as measured by the index of microcirculatory resistance (IMR).

METHODS Patients referred for cardiac catheterization for angina who are found to have non-obstructive epicardial CAD underwent invasive coronary flow and pressure assessment including IMR (Mean distal pressure X hyperemic transit time). Patients with elevated resistance (IMR >20) at baseline were enrolled and treated with ranolazine 1000 mg BID for four weeks. Post treatment IMR was measured at the completion of 4 weeks. Primary outcome measure was change in IMR post treatment. Secondary outcome measure was change in exercise tolerance, activity status and change in Seattle Angina Questionnaire (SAQ) post treatment.

RESULTS 7 patients were enrolled. Mean age was 57.6±11.5 and less than 40% of patients were female. All patients had improvement in IMR after treatment (Table 1). This was mainly driven by improvement in mean aortic and distal perfusion pressure post treatment.

CONCLUSION In this pilot proposal, among patients with angina and Type 1 CMVD, early data shows favorable changes in microcirculatory function, symptoms and activity status with ranolazine.

N=7	Pre-Treatment	Post Treatment	
Mean baseline transit time(sec)	1.7±0.39	1.5±0.29	NS
Mean hyperemic transit time(sec)	0.5±0.24	0.4±0.24	NS
IMR	37.3±16.3	19.5±5.7	0.04
Abnormal TIMI flow (%)	100	60	
Mean Pressure (aortic)(mm hg)	79.6±23.2	59.4±22.4	0.04
Mean Pressure (distal) (mm hg)	72.7±28.38	50.6±20.64	0.03
LVEDP (mm hg)	13.6±4.0	12±6.9	NS
CFR	3.6±1.5	4.3±2.0	NS
FFR	0.91±0.05	0.84±0.04	0.03
DASI	34.5±22.7	50.1±7.4	0.09
METS	6.7±2.8	8.9±0.9	0.09

CRT-200.08

The Role Of Trimetazidine In The Prevention Of Contrast-induced Nephropathy After Coronary Angiography Procedures

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BACKGROUND Contrast induced nephropathy (CIN) may be defined as ARF that occurs within 24-72 hours of exposure to I.V. or intra-arterial iodinated contrast media that cannot be attributed to other causes. CIN occurs in up to 5% of hospitalized patients with normal renal function prior to injection of contrast media. It occurs more frequently in patients with renal impairment particularly if associated with diabetic nephropathy. Among all procedures utilizing contrast agents for either diagnostic or therapeutic purposes, coronary angiography and percutaneous coronary interventions are associated with the highest rates of CIN. Trimetazidine has been described as a cellular anti-ischemic agent. Previous studies demonstrated that Trimetazidine prevents the deleterious effects of ischemia-reperfusion at both the cellular and mitochondrial levels and exerts an anti-oxidant effect. It inhibits excess release of oxygen free radicals, limits cellular acidosis, protects ATP stores, reduces membrane lipid peroxidation and inhibits neutrophil infiltration.

AIM To evaluate the role of Trimetazidine (TMZ) in prevention of contrast induced nephropathy (CIN) in patients with renal impairment undergoing coronary angiography.

METHODS AND RESULTS This study was conducted on one hundred patients having a basal creatinine clearance below 90 ml/min and presenting for coronary angiography procedures within the period between August 2015 and June 2016. The patients were divided into two equal groups each including fifty patients where both groups received parenteral hydration in the form of isotonic saline at a rate of 1 mg/kg body weight per hour starting 12 hours before angiography and up to 12 hours thereafter. In Group 1, patients received additional medication in the form of trimetazidine 35 mg twice daily for 72 hours and starting 48 hours before the procedure which was not received in group 2 (control).

There was a significant difference as regards the rate of CIN among TMZ versus control groups (10% vs. 26%). The amount of contrast was significantly higher in the CIN group (165.00 ± 108.41 vs 89.85 ± 38.60, P=0.000).

CONCLUSION Administration of trimetazidine in a dose of 35mg twice daily orally in conjunction with standard early saline hydration is an effective method to prevent or reduce the incidence of contrast-induced renal dysfunction following the administration of contrast media during coronary angiography procedures in patients with mild-moderate basal renal insufficiency.

CRT-200.09

Acute Results of PCI for CAD in Octo & Nanogenerian Patients

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BACKGROUND Cardiovascular (CV) disease is the most frequent diagnosis in elderly people and it is the leading cause of death in both men and women older than 65 years of age. Historically elderly are prone to more conservative and use less aggressive therapies. Nevertheless, given their high-risk status, the elderly with heart disease are also a group that is very likely to experience improvements in clinical outcomes and functional status with revascularization. However, they are also more likely to experience procedural complications, owing to age-related physiological changes, frailty, and Comorbidities.

OBJECTIVE The limited representation of elderly patients in clinical trials has resulted in fewer data about the effectiveness of various strategies in this population.

MATERIAL AND METHODS This is a retrospective observation study. In this study we have analyzed demographic, clinical, angiographic, procedural characteristics of octo and nanogenerian patients who were undergone PCI for CAD between 2010 to 2015 in NIMS.

RESULTS Total 174 patients has undergone PCI in the given period, of them 78% were males & 22% were females. The mean age is 82.4±2.8 yrs with maximum of 99yrs. Only 3 nanogenerian patients underwent PCI. 94 patients (54%) presented with CSA, rest of them with Acute coronary syndrome. Of patients presented with CSA, 40% have evidence of ischemia in ECG in the form of ST/T changes. 64% Patients have normal LV function at presentation. Among patients with LV dysfunction, mild LV dysfunction is seen in 70%patients. 69% patients had single vessel disease of them LAD disease is more common followed by RCA then LCX. Requirement of pre-dilatation is seen in 88% patients due to presence of tight narrowing / calcification. Stenting is not possible in 8 (4.6%) patients due to severe calcification. BMS implantation done in 25 patients & DES implantation in 141 patients. Procedural success is seen in 95.4% patients which is comparable to younger age group patients. 32% patients required stents of length > 20mm. Diameter of all the stents is >2.5 mm. Only 4% patients procedural complications in the form of major bleed or pseudoaneurysm /CIN.