not due to CAD. Identification and reduction of risk factors is important in preventing morbidity and mortality due to CAD in females.

High versus low intensity statin therapy prior to thrombolysis in Indian patients with acute ST-segment elevation myocardial infarction

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Objectives: This study sought to compare high intensity statin versus low intensity statin therapy in Indian patients with ST-segment elevation myocardial infarction (STEMI) undergoing thrombolysis.
Background: Previous randomized trials have demonstrated that statin pre-treatment reduced major adverse cardiac events (MACEs) in patients with stable angina pectoris and acute coronary syndrome. However, randomized studies of statin therapy in Indian patients with STEMI are scarce.
Methods: Of 1230 patients with acute STEMI, 460 patients satisfied the inclusion criteria and were randomized to 80-mg atorvastatin ($n = 225$) or 10-mg atorvastatin ($n = 235$) arms for pre-treatment before thrombolytic therapy. The primary end point was 30-day incidence of MACE including death and nonfatal MI. Secondary end points included readmission and ST-segment resolution at 90 min after thrombolysis.
Results: The two groups did not differ in their primary endpoints. MACE occurred in 12 (5.33%) and 14 (5.96%) patients in the 80-mg and 10-mg atorvastatin pre-treatment arms, respectively ($p = 0.92$). But ST-segment resolution was significantly higher in the 80-mg atorvastatin arm (64.87 ± 14.84 vs $54.84 \pm 16.01\%$, $p < 0.001$). Of note, myalgia was significantly more in 80 mg statin group (18.22% vs 7.66%, $p = 0.001$).
Conclusions: High-dose atorvastatin pre-treatment before thrombolysis did not show a significant difference of MACEs compared with low dose atorvastatin but did show significant improvement in immediate coronary flow after thrombolysis as depicted by ST-segment resolution. This benefit at the cost of subjecting significantly greater number of patients to significant myalgia, questions the usefulness of high dose statin in Indian patients.

Ivabradine versus metoprolol in patients with acute inferior wall myocardial infarction – 'Expanding arena for ivabradine'

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Background: Beta blockers in ST-segment elevation myocardial infarction (STEMI) are indicated in patients with high heart rates (HR) or left ventricular (LV) dysfunction. But atrioventricular (AV) blocks are the biggest concern in inferior MI with beta blockers. In contrast ivabradine may lower heart rate with a lesser risk of AV blocks.
Aim: To investigate the feasibility, tolerability, and the efficacy of ivabradine versus metoprolol in acute inferior STEMI and during 30 days of follow up.
Methods: It was a prospective double blind single centre randomized controlled study. Of 1032 patients with acute inferior STEMI, 564 patients did not fulfill the inclusion criteria and were excluded. 468 patients were included in the study and were randomized in 1:1 manner to ivabradine (group A) and metoprolol (group B). 42 patients were lost on follow up and excluded. Per protocol analysis of 426 patients (group A – 210 and group B – 216) was done. The primary end point was 30-days incidence of MACE including death, reinfarction, complete heart block (CHB), and heart failure. Secondary endpoints included 30 days incidence of recurrent angina, readmission, first or second degree AV block, and tachyarrhythmias.
Results: Both the drugs decreased the mean heart rate to 62.22 ± 2.95 (group A) vs 62.53 ± 3.59 (group B) beats per minute ($p = 0.33$). Ejection fraction improved in both the groups (2.4% in group A vs 3.2% in group B). The two groups did not differ significantly in their primary endpoints in terms of death (group A = 1.90% vs group B = 1.85%, OR = 1.03, 95% CI = 0.25–4.17, $p = 0.97$), reinfarction (group A = 0.95% vs group B = 0.93%, OR = 1.03, 95% CI = 0.14–7.37, $p = 0.98$), heart failure (group A = 4.76% vs group B = 2.78%, OR = 1.75, 95% CI = 0.62–4.90, $p = 0.29$), or CHB (0% vs 2.78%, OR = 0.08, 95% CI = 0.004–1.37, $p = 0.08$). There were no significant differences in the secondary end points of recurrent angina, readmission, and tachyarrhythmias but significantly more first degree AV blocks occurred with metoprolol (13.89% vs 2.86%, OR = 5.48, 95% CI = 2.23–13.47, $p = 0.0002$).
Conclusions: Ivabradine is well tolerated and equally effective as metoprolol in acute inferior wall STEMI patients for lowering the heart rate with significant less risk of AV blocks.

Bifurcation stenting – A single center experience

M. Dhanapal

Bifurcation is the division of an artery into 2 branches and it is a common anatomical feature of the human coronary tree. Bifurcation lesions are recognized as a common site for atherosclerotic plaque build up and account for 15–20% of all interventions. These lesions are complex and challenging for percutaneous intervention. Numerous anatomic patterns of bifurcation stenosis are present and there is no consistent and reliable methodology to address these complex lesions, that is, there is no ''one size fits all'' solution to the bifurcation puzzle. The optimal percutaneous coronary intervention technique remains undetermined.
Method: We analysed all the bifurcation lesion stenting procedures done at our institution for three years from 2012 to 2015.
Results: Total of 138 cases of bifurcation stenting was done over a period of three years. There were 96 males and 42 females. Anterior wall myocardial infarction accounted for 89% of all cases and the remaining were inferior wall myocardial infarctions.
True bifurcation lesions were 53 in number.
86 cases had bifurcation lesion involving the LAD, 45 involved the LCX, and 7 involved the RCA.
The predominant method of stenting was ''T'' at provision (TAP) and involved 91 cases.
12 cases underwent ''Minicrush'', 8 underwent simultaneous kissing stent (SKS) technique, and 27 cases underwent Classic T stenting.
Conclusion: The predominant technique of stenting was the TAP technique, which was always followed by proximal optimization of stent (POTS) to ensure side branch patency. Most of the bifurcation