

**Conclusions:** LMS PCI can be safely performed using radial arterial access. Operator confidence to use radial access increases with period of time and experience.

## Multivessel Disease

### CRT-53

#### Partial Revascularization Plus Medical Treatment Versus Medical Treatment Alone In Patients With Multivessel Coronary Artery Disease Not Eligible For CABG

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**Aim:** The purpose of this study was to compare the impact of incomplete revascularization (IR) plus OMT to OMT alone on 1 year clinical outcomes (death, hospitalization for decompensated heart failure, acute coronary syndrome (ACS), angina class, ejection fraction (EF) and repeated revascularization) in patients with multivessel coronary artery disease (MVD) who were not eligible for coronary bypass graft surgery (CABG).

**Methods:** This is a prospective randomized study conducted on 50 selected patients with chronic stable angina and without past history of revascularization; they have documented MVD by standard coronary angiography and CABG were the only option of revascularization but were refused by surgeon. All patients had non-viable myocardium documented by viability studies were excluded from the study.

Patients were randomized 1:1 into two groups, group (I): 25 patients were subjected to OMT alone and group (II): 25 patients were subjected to IR {PCI in one or two vessel only with drug eluting stents (DES)} plus OMT. All patients were subjected to 1 year follow up.

**Results:** The baseline patients' characteristics were matched in the two studied groups. Also, high syntax score ( $\geq 33$ ) was almost found in majority of patients in both groups (23 patients in OMT group and in 24 patients in IR plus OMT group;  $p = 1.000$ ). All patients were followed up for 1 year; death occurred slightly more in IR plus OMT group (16% versus 12%;  $p=1.000$ ), hospitalization for decompensated CHF occurred more in the OMT group (28% versus 12%;  $p=0.289$ ), ACS occurred more in the OMT group (32% versus 16%;  $p=0.321$ ) while freedom from angina occurred more in IR plus OMT group (20% versus 4%;  $p=0.189$ ); however all these differences were not statistically significant. In IR plus OMT group; TVR occurred in 16% of patients while non-TVR in 32% of patients. The OMT alone did not affect neither the level of angina class nor EF; while the IR plus OMT markedly improved the decline in the level of angina class ( $p = 0.011$ ), but it did not improve EF significantly ( $p = 0.326$ ).

**Conclusion:** In patients with MVD who were not eligible for CABG; IR plus OMT was not superior to OMT alone in improving the 1year clinical outcomes except the improvement in the level of angina class, which could be the adopted strategy to improve the quality of life in such patients.

### CRT-54

#### Impact Of Multivessel Disease In Patients With Chronic Total Occlusion On Six-month Angiographic And Two-year Clinical Outcomes

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**Background:** Chronic total occlusion (CTO) intervention is still challenging because of the limited procedural success rate and higher recurrence. It is not clear whether the presence of multivessel disease (MVD) will negatively impact on angiographic and clinical outcomes following CTO intervention as compared with single vessel disease (SVD).

**Methods:** A total of 238 consecutive patients (pts) underwent CTO intervention were divided into two groups according to the number of treated vessel (MVD with CTO:  $n=149$  pts, SVD with CTO:  $n=89$  pts). Six-month angiographic and twelve-month clinical outcomes were compared between the two groups.

**Results:** The baseline clinical characteristics were balanced between the two groups except higher incidence of myocardial infarction (MI, 31.5 vs. 17.9  $p=0.021$ ) and a lower left ventricular ejection fraction (LVEF,  $47.97 \pm 12.1\%$  vs.  $52.75 \pm 9.3\%$ ,  $p=0.001$ ) in the MVD group. The overall procedural success rate, procedural characteristics and procedure related complications including perforation and dissection were not different between the two groups. Angiographic outcomes at 6 months and major clinical outcomes up to 24 months were similar between the two groups except a trend toward higher incidence of total death and major adverse cardiac events (MACE) in the MVD group (Table).

**Conclusions:** Once the CTO intervention was successful, the presence of MVD in CTO patients did not negatively impact on 2-year major clinical outcomes.

Table. Six-month Angiographic and 24-month Clinical Outcomes

6-Month Angiographic Outcomes	CTO with MVD (n = 85 pts)	CTO with SVD (n = 47 pts)	P-value
Binary restenosis (>50%)	16 (18.8)	6 (12.7)	0.371
DS%	31.61 ± 27.37	26.10 ± 23.71	0.239
FU MLD (mm)	2.024 ± 0.852	2.219 ± 0.757	0.183
Late Loss (mm)	0.676 ± 0.788	0.564 ± 0.707	0.409
24-Month Clinical Outcome	(n = 136 pts)	(n = 86 pts)	P-value
Total Death	8 (5.8)	1 (1.1)	0.082
Cardiac death	4 (2.9)	0 (0.0)	0.109
Any MI	4 (2.9)	2 (2.3)	0.783
Q wave	4 (2.9)	2 (2.3)	0.783
Repeat PTCA	27 (19.8)	12 (13.9)	0.261
TLR	17 (12.5)	11 (12.7)	0.949
TVR	22 (16.1)	11 (12.7)	0.490
All MACE	34 (25.0)	13 (15.1)	0.079
TLR MACE	19 (13.9)	12 (13.9)	0.997

### CRT-55

#### Is It Safe to Perform Staged Percutaneous Coronary Intervention On Non-Culprit Vessels During the Index Hospitalization in Patients with ST-Segment Elevation Myocardial Infarction and Multivessel Coronary Artery Disease?

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**Background:** In patients with ST-segment elevation myocardial infarction (STEMI) and multivessel disease undergoing primary percutaneous coronary intervention (PCI), staged non-culprit vessel PCI at a separate session is recommended. It is not known whether performing staged PCI within the same hospitalization as the primary PCI is safe.

**Methods:** We analyzed 282 consecutive STEMI patients with multivessel disease who underwent primary PCI followed by staged PCI of the non-culprit vessel. Patients were categorized into staged PCI in the same hospitalization ( $n=184$ ) and staged PCI at a separate hospitalization within 8 weeks of primary PCI ( $n=98$ ). In-hospital outcomes and procedural complications after staged PCI were analyzed.

**Results:** Baseline characteristics, STEMI presentation and procedure characteristics were similar in both groups. Contrast amount used was higher in the separate versus same hospitalization group for both index (175 vs. 153ml,  $p=0.011$ ) and staged (144 vs. 120ml,  $p=0.004$ ) PCI. More left main PCI occurred in the separate hospitalization group during the staged PCI (3.9 vs. 0.3%,  $p=0.008$ ). Angiographic success of staged PCI was similar in same versus separate hospitalization, with similar rates of vascular complications and major bleeding, but a trend toward higher incidence of acute renal failure. Following staged PCI, in-hospital major adverse cardiac events (3.3 vs. 1.0%,  $p=0.43$ ) and mortality (2.7 vs. 0%,  $p=0.17$ ) were similar in both groups.

**Conclusion:** It is safe to perform staged PCI within the same hospitalization as primary PCI, achieving similar procedural success and in-hospital outcomes as staged PCI at a separate hospitalization. Higher contrast volume used during primary PCI and the presence of left main lesion in non-culprit vessels may influence the decision to stage the PCI at a separate hospitalization.