

LM INTERVENTION IN THE SETTING OF PPCI

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HISTORY

- Our pt is 85 years old with no history of DM, hypertension or cardiac disease.
- Currently smoker (1 pack) .
- The pt had chest pain 12 hours before admission.
- His Bp 90/60 , HR 100 with diffuse severe bronchospasm and bilateral basal creps.
- The ECG showing Q waves with ST elevation in the anterior leads .
- Cardiac enzymes elevated.
- Mild renal impairment , cr =1.7
- Echo revealed depressed systolic function, EF 30% with SWMA in the anterior, septal and apical regions.

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- Unprotected left main (LM) coronary artery disease is observed in 3% to 5% of patients undergoing coronary angiography and it has major prognostic implications.
 - Recent data show that percutaneous coronary intervention (PCI) may be a safe and effective alternative to surgical revascularization in selected patients.
 - However, unprotected LM disease still poses a significant challenge to the interventional cardiologist

Primary PCI has become the standard treatment for patients presenting with acute ST-segment elevation myocardial infarction (STEMI).

Patients who present with myocardial infarction (MI) and have ULMCA disease represent a *very high-risk* group of patients who are critically ill with prohibitive operative risk because it may be associated with cardiogenic shock, malignant ventricular arrhythmias, and sudden death

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- (PCI) is becoming an attractive option in patients with acute myocardial infarction and ULMCA , especially when in cardiogenic shock
 - Advances in devices and adjunctive pharmacotherapy make PCI of the ULMCA feasible and with at least non-inferior results to CABG

It is interesting that most clinical trials evaluating outcomes of left main coronary artery angioplasty as compared with other therapies exclude patients with acute coronary syndromes

DO WE HAVE DATA ABOUT??

LEFT MAIN PERCUTANEOUS CORONARY INTERVENTION IN ST ELEVATION MYOCARDIAL INFARCTION.

[Rev Port Cardiol.](#) 2008 Jul-Aug;27(7-8):965-73

CONCLUSIONS:

Clinical presentation of STEMI with the culprit lesion in the left main artery was very severe. During PCI, DES, IABP and abciximab were used in almost all patients. This entity had a **high mortality** rate even though primary PCI was performed. Those who survived had a **good mid-term** prognosis.

Primary Percutaneous Coronary Intervention for
Unprotected Left Main Disease in Patients With Acute ST-
Segment Elevation Myocardial Infarction The **AMIS** (Acute
Myocardial Infarction in Switzerland) Plus Registry
Experience

JACC: CARDIOVASCULAR INTERVENTIONS, VOL. 4, NO. 6, 2011

The LM patients had higher rates of cardiogenic shock (12.2% vs. 3.5%; p 0.001), cardiac arrest (10.6% vs. 6.3%; p 0.01), in-hospital mortality (10.9% vs. 3.8%; p 0.001), and major adverse cardiac and cerebrovascular events (12.4% vs. 5.0%; p 0.001) than non-LM PCI

Conclusions : LM PCI in the context of acute myocardial infarction, even including 12% cardiogenic shock, appears to have a remarkably high (89%) in-hospital survival. Concurrent LM and non-LM PCI has worse outcomes than isolated LM PCI.

MULTICENTER INTERNATIONAL REGISTRY OF UNPROTECTED LEFT MAIN CORONARY ARTERY PERCUTANEOUS CORONARY INTERVENTION WITH DRUG-ELUTING STENTS IN PATIENTS WITH MYOCARDIAL INFARCTION

Catheterization and Cardiovascular Interventions 73:15–21 (2009)

Overall in-hospital major adverse cardiac event (MACE) rate was 10%, mortality was 8%, all due to cardiac deaths from cardiogenic shock, and one patient suffered a periprocedural MI

Conclusions: Patients with MI and ULMCA disease represent a very high-risk subgroup of patients who are critically ill. PCI with DES appears to be technically feasible, associated with acceptable long-term outcomes, and a reasonable alternative to surgical revascularization for MI patients with ULMCA disease

TAKE HOME MESSAGE

- PPCI is currently the standard treatment for STEMI patients.
- LM disease is not a common finding in the setting of AMI.
- PPCI to UPLM is associated with a higher incidence of mortality, MACE, and cerebral accidents when compared to interventions not involving LM.
- Despite this PPCI is still a good treatment option for this group of patients, especially those with cardiogenic shock and those who survived the event have good mid-term results.
- We still need more data and randomized trials directed to this particular entity of patients with AMI and UPLM disease.

THANK YOU