

LEFT MAIN PCI FOR URGENT REVASCULARIZATION IN PATIENTS WITH CARDIOGENIC SHOCK

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Introduction

- Cardiogenic shock remains the most common cause of in-hospital death in patients with MI, and only a few treatment strategies are based on randomized trial evidence.
- The guidelines do recommend an early revascularization strategy (either percutaneous coronary intervention or coronary artery bypass grafting) for all suitable patients with suspected acute coronary syndrome-associated cardiogenic shock.

CASE NO 1

Clinical scenario

- Male pt 66 years old
- Hypertensive
- Diabetic (IDDM).
- He presented to incapable hospital by acute extensive anterior myocardial infarction and received thrombolytic therapy.
- Then the pt shocked and inotropic support was started and transferred to our hospital for rescue PCI.
 - Echo: EF 30% mildly dilated LV dimensions, Akinetic anterior wall and hypokinesia of posterior wall.

The prognosis

- Patient didn't improve and IAB was inserted but he died after 24 hours.

CASE NO 2

Clinical History

- Male pt 56 years old.
- Diabetic(1DDM).
- He presented to the ER with cardiogenic shock (no urine output, agitated and the maximal doses of inotropic support was started) and his 1st ECG showed Q waves in anterior leads(V1 to V6) and his cardiac enzymes were highly elevated (his old ECG 1 week ago was normal sinus rhythm).
- Creatinine: 1.6 mg/dl
- Echocardiography was done to Exclude mechanical complications with EF<30%.
- The decision to do Coronary angiography

Follow up

- The pt improved and discharged from the hospital after one week.
- Now he is doing well for 2 years with EF 45%.

CASE NO 3

- Female pt 78 ys old.
- Dyslipidemic, hypertensive and diabetic.
- BMI 30.5
- She complained of typical chest pain(CCS IV).
- So she admitted at CCU and diagnosed as NSTEMI.

- ECG: inverted T waves in precordial leads and slight ST segment elevation of AVR lead.
- Her labs : HB 11.6G/DL
- UREA 80,Creatinine 1.5
- tropinine 0.5
- ECHO : showed fair LV systolic function(50%)
- RSWM abnormality in the form of hypokinetic anterolateral and inferoposterior walls .

- Coronary angiography showed LM and multivessel disease and she referred to CABG.
- CABG was arranged after one week and she admitted in the hospital one day prior the surgery.
- But the pt had severe chest pain at midnight and she diagnosed as NSTEMI and shortly she became hemodynamically unstable
- So the urgent PCI was planned

Follow up

- The pt improved and discharged from hospital after 3 days.
- I didn't see her again and suddenly she came after 3 years to do cardiac check up before vascular surgery.
- She didn't complain from any cardiac related problem during the 3 years.

Mini-Focus Issue: STEMI
Clinical Research

Myocardial Percutaneous Coronary Intervention of Unprotected Left Main Coronary Artery Disease as Culprit Lesion in Patients With Acute Myocardial Infarction

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Objectives
This study sought to evaluate short- and long-term outcomes of patients undergoing emergency percutaneous coronary intervention (PCI) for acute myocardial infarction due to a culprit lesion in an unprotected left main coronary artery.

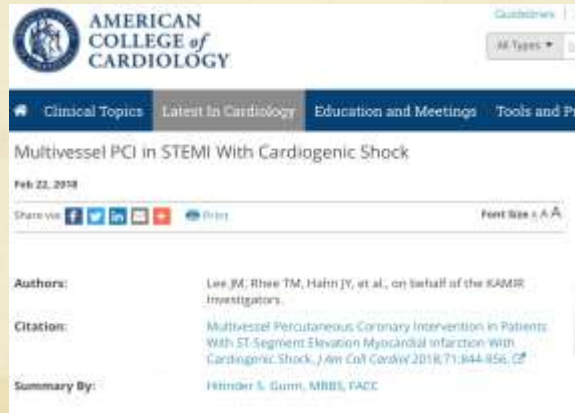
Methods
In this retrospective, 2-center, international observational study, 5,261 patients were admitted between February 2005 and December 2008 with acute myocardial infarction and treated with PCI; of these, 1,277 were ST-segment elevation myocardial infarction and 3,984 non-ST-segment elevation myocardial infarction. We identified 48 patients among this cohort who underwent emergency PCI to an unprotected left main coronary artery culprit

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Conclusions:

In this observational study, compared with IRA-only PCI, multivessel PCI was associated with a better outcome in patients with shock complicating STEMI.



Take Home Message

- Remember the complex PCI should be fast, feasible and safe.
- In the setting of acute coronary syndromes, percutaneous intervention of unprotected LMCA lesions can be performed with reliable results in selected patients.
- Cardiogenic shock and hemodynamic instability are obligatory indications for PCI.

Take Home Message



- To report failure of any intervention, we should have all equipment's for it including circulatory support.

Take Home Message



- Its all about the heart team approach.

Take Home Message



- Step by step approach for those pt is a cornerstone to get a good results.



