

ACS Intervention

Cardiogenic Shock

Mustafa El Saied
,MD,FSCAI

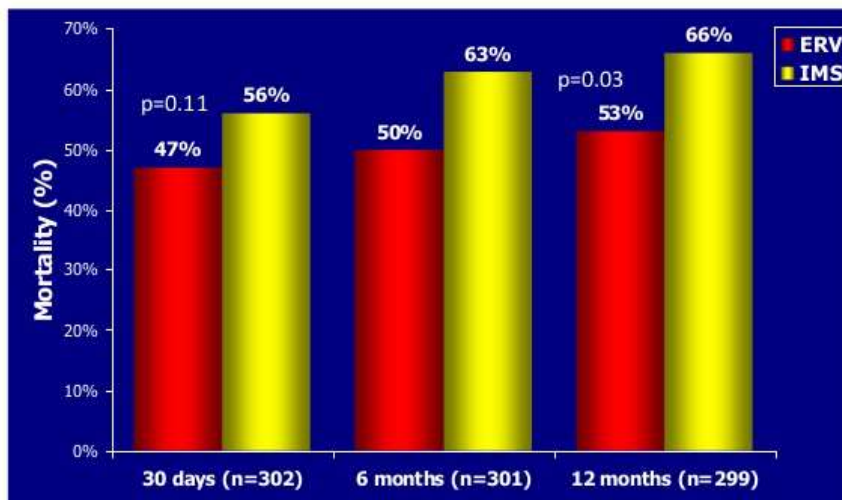
Cardiogenic shock definition

- CS is a clinical condition of inadequate tissue (end organ) perfusion and Hypoxia due to cardiac dysfunction.
- The definition include the following hemodynamics:
 - Persistent hypotension <80-90 mm hg
 - low CI <1.8 L/min/m²
 - Adequate or elevated filling pressure

Shock trial

- The 30 days mortality rate in those who underwent CP artery reperfusion by PTCA was reduced (38%) Vs those who didn't (79%) In the absence of CS.
- In patients with CS The mortality was not significantly different (46.7% Vs 56.0%) .

Emergency revascularisation - SHOCK Trial



85% of survivors NYHA Class I/II at 12 months
 Hochman JAMA 2000;285:190

The trials that changed the guidelines in 2017

- PRAMI
- DANAMI3
- PRIMULT
- CvPRIT
- All showed possible benefit with multi-vessel PCI.
- The current guidelines and appropriate use documents recommend MV-PCI.

THE 2017 ESC guidelines for the management of STEMI.

- Routine radial approach and routine DES implant is the standard of care during primary PCI.
- Routine thrombus aspiration or deferred stenting are contraindicated.
- Treatment of severe stenosis should be considered before hospital discharge (either immediately after the index PCI or staged at a later time
- In CS non-IRA PCI should be considered during index PCI.

CULPRIT-SHOCK:CV-PCI Vs. immediate MV-PCI. Holger Thiele, MD 2017

Principal Findings:

The primary outcome, all-cause mortality or need for renal replacement therapy (RRT), for culprit-lesion-only vs. multivessel PCI at 30 days, was 45.9% vs. 55.4%, hazard ratio 0.83, 95% confidence interval 0.71-0.96, $p = 0.01$

- All-cause mortality: 43.3% vs. 51.6%, $p = 0.03$
- Need for RRT: 11.6% vs. 16.4%, $p = 0.07$

Secondary endpoints for culprit-lesion-only vs. multivessel PCI:

- Recurrent MI: 1.2% vs. 0.9%, $p = 1.0$
- Any bleeding: 16.6% vs. 22.0%, $p = 0.07$
- Stroke: 3.5% vs. 2.9%, $p = 0.68$
- Total contrast use: 190 vs. 250 cc, $p < 0.001$



The Current Status of Percutaneous Coronary Intervention in Korea: Based on Year 2014 Cohort of Korean Percutaneous Coronary Intervention (K-PCI) Registry Korean Circ J. 2017 May Jae-Sik Jang, MD, et al.

Patients With STEMI and Cardiogenic Shock: 1-Year Outcomes

	Multivessel PCI	IRA-Only PCI	Adjusted HR (95% CI)
All-Cause Death	21.3%	31.7%	0.52 (0.38-0.73)
Non-IRA Repeat Revascularization	6.7%	8.2%	0.33 (0.14-0.78)
Patient-Oriented Composite	28.4%	42.6%	0.58 (0.40-0.83)

CONCLUSION

- Evidence continue to support the early revascularization of patients with ACS, either PCI or CABG used as indicated.
- The CULPRIT-SHOCK recommended culprit-vessel only PCI .
- Korean registry recommended multi-vessel PCI.
- We are waiting new guidelines
- Incidence of iatrogenic left main dissection is <0.01%.
- Experienced team ,immediate stenting ,and complete revascularization are equally important to reduce the incidence of in hospital and long term mortality.

Thank you..