

### Early Revascularization in Elderly Patients $\geq 80$ years-Old Presenting with Acute Myocardial Infarction and Cardiogenic Shock

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**Background:** The benefit of early revascularization in cardiogenic shock is well established. However, the efficacy of an invasive strategy in shock pts  $\geq 80$  years-old is controversial. **Methods:** We retrospectively identified 35 pts  $\geq 80$  years-old with cardiogenic shock due to acute MI in whom a primary coronary intervention strategy was implemented. Clinical characteristics and survival were analyzed. **Results:** Mean age was  $85 \pm 3$  (range 80-97) years. Mean symptom-to-admission and door-to-balloon times were  $319 \pm 343$  (range 46-1540) and  $126 \pm 76$  (range 30-448) minutes, respectively. Eighteen (51%) had anterior infarction, 13 (37%) were mechanically ventilated, 24 (69%) received intra-aortic balloon pump and 11 (31%) needed a temporary pacing. Mean SYNTAX and TIMI STEMI risk scores were  $28 \pm 16$  (range 5.0-58.5) and  $10.7 \pm 1.5$  (range 8-14) points, respectively. Overall, 2 patients died before revascularization, 27 underwent PCI, 4 underwent emergency CABG and 2 were treated medically following diagnostic angiography. Mortality rates were 14% during the first day, 48% in-hospital, 51% at 30 days and 60% at 1 year. In univariate analysis, anterior infarction predicted increased mortality ( $p=0.018$ ), whereas the RCA as culprit vessel was associated with lower mortality ( $p=0.005$ ). Increased TIMI STEMI risk score predicted mortality ( $p=0.002$ ) but SYNTAX score did not. Interestingly age, symptom-to-admission and door-to-balloon times did not predict outcome. **Conclusion:** Cardiogenic shock complicating acute MI in pts  $\geq 80$  years-old carries a high mortality rate. Following early urgent revascularization half the pts were alive at 1 month and 40% at 1 year. Policy regarding health care resource allocation for intervention and intensive cardiac care in these patients should be made at an institutional and societal level.

Age (years): (Mean $\pm$ SD)	85 $\pm$ 3
Female sex: n (%)	14 (40)
Diabetes: n (%)	7 (20)
STEMI: n (%)	32 (91)
NSTEMI: n (%)	3 (9)
Time from symptoms to admission (minutes): (mean $\pm$ SD)	319 $\pm$ 343
Time from Door to balloon (minutes): (mean $\pm$ SD)	126 $\pm$ 76
Cardiopulmonary resuscitation: n (%)	9 (26)
Intra-aortic balloon counterpulsation: n (%)	24 (69)
Temporary pacing: n (%)	11 (31)
SYNTAX score: (mean $\pm$ SD)	28 $\pm$ 16
TIMI RISK score: (mean $\pm$ SD)	10.7 $\pm$ 1.5
PCI: n (%)	27 (77)
CABG: n (%)	4 (11)
24 hour mortality: n (%)	5 (14)
In-hospital mortality: n (%)	17 (49)
30-day mortality: n (%)	18 (51)