

## IMPACTS OF GENSINI SCORE FOR CORONARY ANGIOGRAPHIC SEVERITY ON OUTCOMES OF OUT-OF-HOSPITAL CARDIAC ARREST DUE TO ACUTE MYOCARDIAL INFARCTION PATIENTS

i2 Poster Contributions

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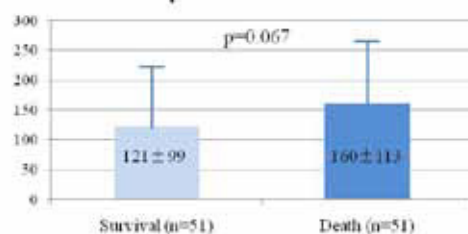
**Background:** Though acute myocardial infarction (AMI) is a leading cause of out-of-hospital cardiac arrest (OHCA), relationship between angiographical severity of the coronary artery disease and clinical outcomes is unclear in OHCA.

**Methods:** From April 1999 up to March 2010, 270 cardiac-origin OHCA patients, 102 of which had AMI (89 male, 59±12 years), were admitted to our hospital. We investigated relationships between the mortality, the neurological outcomes at 30 days and severity of the coronary artery disease in those OHCA patients with AMI. Neurological outcomes and severity of the coronary disease were assessed by cerebral performance category (CPC) and Gensini score (GS), respectively.

**Results:** Extracorporeal life support was performed in 58 patients (57%) with poor recovery of spontaneous circulation. Emergency PCI and therapeutic mild hypothermia were performed in 93 (91%) and 67 (66%) patients, respectively. Mean GS in all 103 patients was 139.4. The GS in patients who survived at 30 days tended to be lower than in patients not survived (121±99 vs. 160±113,  $p=0.067$ ) (Figure 1A). The GS in patients with CPC 1, defined as good neurological recovery, was significantly lower than that in patients without CPC 1 (106±94 vs. 154±110,  $p=0.040$ ) (Figure 1B).

**Conclusion:** Assessment of angiographical severity of coronary artery disease by Gensini score is potentially useful for prediction of neurologic outcome and short-term mortality in AMI patients with OHCA.

**Figure 1A**  
Gensini score between patients with survival and death at 30-days



**Figure 1B**  
Gensini score between patients with CPC 1 and CPC 2-5 at 30-days

