

## **P2605 : Comparison between acute myocardial infarction patients with or without heart failure criteria from the French Acute non-ST- or ST-elevation Myocardial Infarction (FAST-MI) registry**

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The aim of this study was to assess the outcome of heart failure (HF) pts among acute MI pts in the French nationwide 2005 FAST-MI registry compared to pts without HF criteria.

Among the whole population (n=3059) of the FAST-MI registry constituted of pts admitted to ICUs for acute MI over a 1-month period in November 2005, pts with at least one of the following criteria: previous history of HF before admission, symptoms of HF and/or Killip class  $\geq 2$  on admission, LVEF  $\leq 40\%$  on admission or at discharge, were defined as HF patients (gr1, n=1149, 37.5%). They were compared to pts without HF (gr2, n=1910, 62.5%) for baseline characteristics, drug prescriptions at discharge and mortality rates.

Gr1 pts were older than in gr2 ( $72.6 \pm 13.4$  vs  $63.5 \pm 13.9$  yrs,  $p < .0001$ ), and less frequently male ( $62.4$  vs  $72.0\%$ ,  $p < .0001$ ). They more often had previous history of hypertension ( $65.9$  vs  $52.2\%$ ,  $p < .0001$ ), diabetes ( $30.5$  vs  $19.6\%$ ,  $p < .0001$ ), and renal failure ( $9.5$  vs  $2.8\%$ ,  $p < .0001$ ) than gr2 pts. On admission, mean heart rate was higher in gr1 than in gr2 ( $86 \pm 24$  vs  $77 \pm 16$  bpm,  $p < .0001$ ). Mean systolic pressure was lower in gr1 than in gr2 ( $137 \pm 31$  vs  $140 \pm 27$  mmHg,  $p < .002$ ). Most gr1 pts had atrial fibrillation on admission compared with gr2 pts ( $63$  vs  $37\%$ ,  $p < .0001$ ). Treatment at discharge was different between gr1 and gr2: beta-blockers ( $66$  vs  $76\%$ ,  $p < .0001$ ), ACEI/AII receptor blockers ( $68$  vs  $62\%$ ,  $p < .002$ ), diuretics ( $48$  vs  $11\%$ ,  $p < .0001$ ), aldosterone blockers ( $11$  vs  $1\%$ ,  $p < .0001$ ), and digoxin ( $65$  vs  $35\%$ ,  $p < 0.01$ ).

For the whole population, in-hospital and 6-month mortality rates were  $3.4\%$  and  $10.7\%$ , respectively. In-hospital mortality was dramatically increased in gr1 compared to gr2 ( $12.3$  vs  $1.3\%$ ,  $p < .0001$ ) as well as 6-month mortality ( $22.6$  vs  $3.4\%$ ,  $p < .0001$ ). Length of both ICU and total hospital stay was longer in gr1 than in gr2 (ICU:  $6.5 \pm 6.9$  vs  $4.3 \pm 3.7$  days,  $p < .001$ ; total stay:  $12.1 \pm 10.8$  vs  $7.5 \pm 6.1$  days,  $p < .0001$ ). Multivariate age- and diagnosis (STEMI/NSTEMI)-adjusted analysis among pts discharged alive showed that HF dramatically increased 6-month mortality (OR:  $3.4$ , 95%CI:  $2.3-4.9$ ,  $p < .0001$ ). Treatment effect appeared to be protective for beta-blockers (OR:  $0.5$ , 95%CI:  $0.4-0.7$ ,  $p < .0001$ ) but only not significantly protective for ACEI (OR:  $0.8$ , 95%CI:  $0.6-1.2$ , ns).

Pts admitted for acute MI with HF criteria are still at very high risk of mortality. Favourable effects on mortality are confirmed for beta-blockers and at a lesser degree, for ACEI. Special efforts should be made to encourage their prescription, particularly as regards beta-blocking agents.