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

Authors:
Juilliere (Vandoeuvre-Les-Nancy /France), **Cambou** (Toulouse /France), **Mulak** (Paris /France), **Galinier** (Toulouse /France), **Benamer** (Aubervilliers /France), **Tabone** (Bourges /France), **Simon** (Paris /France), **Danchin** (Paris /France)

On behalf: the FAST-MI Investigators

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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 ≥ 2 on admission, LVEF ≤ 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±13.4 vs 63.5±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±24 vs 77±16 bpm, p<.0001). Mean systolic pressure was lower in gr1 than in gr2 (137±31 vs 140±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±6.9 vs 4.3±3.7days, p<.001; total stay: 12.1±10.8 vs 7.5±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.