Eplerenone reduces primary endpoint in acute myocardial infarction patients

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A drug known to reduce mortality rate in patients with heart failure has now been found significantly effective when administered early in patients following an acute (ST elevated) myocardial infarction. This effect,say the investigators, was consistent across all study sub-groups, but was "particularly obvious in patients undergoing reperfusion within six hours of symptom onset".

Eplerenone, a mineralocorticoid receptor antagonist (MRA), has already been investigated and licensed for the use in patients with heart failure post myocardial infarction, but has so far not been investigated following acute STEMI without ongoing heart failure. Such a study, said principal investigator Gilles Montalescot from the Institut de Cardiologie, Pitie?-Salpe?trie?re University Hospital in Paris, would be "a valuable venture both because of the potentially beneficial effects and a proof of safety in the acute phase of MI".

The study was a multicentre placebo-controlled trial in which 1012 acute STEMI patients with no history of heart failure were randomised to either eplerenone (25/50 mg per day) or placebo, initiated within 24 hours of the onset of symptoms and in addition to standard therapy. The primary endpoint of the study was a composite of cardiovascular mortality, re-hospitalisation or extended initial hospital stay as a result of diagnosed heart failure, sustained ventricular tachycardia or fibrillation, and clear signs of heart fialure (ejection fraction ?40%, or elevated levels of BNP/NT-proBNP [two similar cardiac peptides whose release can be measured as a biomarker of heart failure]).

Results of the study, with an accompanying editorial, are reported today in the *European Heart Journal*.

After a mean follow-up of 10.5 months, the primary endpoint occurred in 93 patients in the eplerenone group (18.4%) and in 150 patients in the placebo group (29.6%). This difference was statistically significant (adjusted hazard ratio 0.57, 95% CI 0.44-0.74, P