

ACE inhibitors, ARBs improve survival in heart failure patients with kidney disease

Reuters Health - Jul. 06, 2007

NEW YORK (Reuters Health) - Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs) can reduce mortality in heart failure patients with chronic kidney disease, according to a report in the June American Heart Journal.

Patients with congestive heart failure (CHF) and chronic kidney disease have a poor prognosis, the authors explain, possibly related to underuse of ACE inhibitors and ARBs.

Dr. Alan K. Berger and colleagues from the University of Minnesota, Minneapolis, used data from the Minnesota Heart Survey to investigate the association of ACE inhibitor and ARB use on 30-day and 1-year mortality in 2169 patients with CHF stratified by glomerular filtration rate (GFR).

In-hospital use and discharge prescription of ACE inhibitors declined with worsening renal function, the authors report, with a steep cutoff among patients with a GFR below 30 mL/min. The increased use of ARBs in patients with worse renal function only partially offset the lower ACE inhibitor use in these patients.

GFR was strongly associated with mortality, at 30 days and at 1 year, the report indicates.

Patients who received ACE inhibitors or ARBs had significantly lower fully adjusted 30-day mortality (odds ratio 0.45) and 1-year mortality (odds ratio 0.72) than did patients who received neither therapy, the researchers report.

These differences in mortality were evident only among patients not on dialysis, however. "The absence of a significant mortality benefit of ACE inhibitors and ARBs among dialysis patients is an interesting observation and, to the best of our knowledge, has not been previously reported," the investigators say.

"Although ACE inhibitors and ARBs are not widely used in this population, our data suggest their administration may be associated with an improved survival, both at 30 days and 1 year," the authors conclude. "The initiation of these agents at low dose with careful monitoring of renal function and serum electrolytes should be considered in all patients with CHF, independent of renal function."

They add, "The use of these agents in patients on hemodialysis clearly warrants further investigation."

Am Heart J 2007;153:1064-1073.

