Should Angiotensin Blockers Be Given Before Cardiac Surgery?

Administering angiotensin-blocking therapy before cardiac surgery has been linked to atrial fibrillation after surgery, thus the practice is controversial. But researchers from Case Western Reserve University and Cleveland Clinic, both in Cleveland, Ohio, who conducted a large observational study, say they found no evidence of an association.

They retrospectively analyzed data from 10,552 patients who underwent coronary artery bypass grafting with or without valve surgery between 1997 and 2003. Preoperative angiotensin-

blocking drugs were prescribed for 4,795 patients, of whom 1,725 (36%) developed postoperative atrial fibrillation before discharge, compared with 1,908 (33%) of 5,757 patients who did not receive the preoperative treatment.

Patients who were treated with angiotensin blockers before surgery did not differ from untreated patients with respect to the occurrence of acute myocardial infarction (n = 29 vs n = 25, respectively; P = .6), stroke (n = 46 vs n = 61, respectively; P = .1), ventricular arrhythmias (n = 205 vs n = 182, respectively; P > .2), cardiac arrest (n = 55 vs n = 45, respectively; P = .3), or in-hospital mortality (n = 47 vs n = 51, respectively; P = .7). This observation, the research-

ers say, suggests that short-term benefits from the preoperative treatment in the surgical setting may be limited and that withdrawal does not increase the propensity of any of those adverse outcomes.

The study results provide no rationale to recommend preoperative angiotensin blockers before cardiac surgery in patients who do not have other compelling indications for such treatment, they conclude. Whether rapid restoration of angiotensin-blocking therapy after cardiac surgery has a positive effect on outcomes has yet to be determined.

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