

ATRIAL FIBRILLATION

The dangers of digoxin in AF

Digoxin is used to control heart rate in 35–70% of patients with atrial fibrillation (AF). The safety of this drug has been questioned, and previous studies have shown an association between digoxin use and mortality. This association could have resulted from the use of the drug itself, from underlying disease, or from other confounding factors. Using data from the AFFIRM study, digoxin has now been found to be associated with increased all-cause, cardiovascular, and arrhythmia-related mortality, even when confounding factors are taken into account.

The AFFIRM study was originally designed to compare rate-control and rhythm-control strategies in the management of AF. Investigators enrolled 4,060 patients with AF who were at risk of stroke. Patients started and stopped taking digoxin throughout the follow-up period (mean 3.5 years).

Patients with AF can be subdivided into two groups—those with concomitant

congestive heart failure (HF) or an ejection fraction <40%, and those with neither. Digoxin was associated with 41% and 37% increased all-cause mortality in patients with or without congestive HF, respectively.

For patients without congestive HF, the researchers do not recommend using digoxin. Other, safer drugs, such as β -blockers and calcium-channel blockers, can be used for rate control. For patients with congestive HF and AF, the decision is less clear. “Digoxin has some benefit ... in heart failure, even if it was studied in patients with heart failure and without AF,” says lead author Claude Samy Elayi. If cardiologists choose to prescribe digoxin, it should be used cautiously, and the drug’s safety should be carefully monitored.

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Original article Whitbeck, M. G. *et al.* Increased mortality among patients taking digoxin—analysis from the AFFIRM study. *Eur. Heart J.* doi:10.1093/eurheartj/ehs348