Clinical management of patients with AF involves the following objectives: prevention of thromboembolism, rate control of heart rate, correction of rhythm disturbance, and symptom relief. For patients with symptomatic AF lasting many days, initial therapy may be anticoagulation and rate control, while the long-term goal may be to restore sinus rhythm. If rate control offers inadequate symptomatic relief, restoration of sinus rhythm becomes a clear long-term goal. Randomized trials such as AFFIRM and RACE comparing outcomes of rhythm vs. rate control management in AF patients found that rate control is not inferior to rhythm control for prevention of cardiovascular morbidity. AF-CHF trial in AF patients with heart failure also showed a similar outcome. Patients with a rapid ventricular response usually need control of their ventricular rate. This can be achieved by oral administration of β-blockers, non-dihydropyridine calcium channel antagonists, or digitalis. Current guidelines of AF management recommend β-blockers as a first line to control their ventricular rate. The combination of a β-blocker and digitalis may be beneficial in patients with heart failure. β-blockers may be especially useful in the presence of high adrenergic tone occurring in association with AF. During chronic treatment β-blockers have been shown to be effective and safe in several studies compared with placebo, digitalis, and other drugs.

Keywords: atrial fibrillation, rate control, beta blocker