

patients considered low risk (CHA₂DS₂-VASc of 0 or 1 [see below]) for stroke. There are two approaches to mitigate the risk related to cardioversion. One option is to anticoagulate continuously for 3 weeks before and a minimum of 4 weeks after cardioversion. A second approach is to start anticoagulation and perform a TEE or high-resolution cardiac CT scan to detect the presence of thrombus in the left atrial appendage. If thrombus is absent, cardioversion can be performed and anticoagulation continued for a minimum of 4 weeks to allow time for recovery of atrial mechanical function. In either case, cardioversion of AF is associated with a substantial risk of recurrence, which may not be symptomatic. Longer-term maintenance of anticoagulation is considered based on the patient's individual risk for stroke, commonly assessed using the CHA₂DS₂-VASc score.

ACUTE RATE CONTROL

The goal of rate control in AF is to allow more diastolic filling time, improving cardiac output and reducing patient symptoms. In the longer term, adequate rate control will minimize the risk of congestive heart failure and tachycardia-induced cardiomyopathy. Acute rate control can be achieved with beta blockers and/or the calcium channel blockers verapamil and diltiazem administered either intravenously or orally, as warranted by the urgency of the clinical situation. Digoxin has been used for many years for rate control, particularly in patients susceptible to congestive heart failure, because it lacks the negative inotropic effect seen in calcium channel blockers and beta blockers. It acts synergistically with beta blockers and calcium channel blockers and, therefore, may be useful as an added agent when rate control is inadequate. However, recent evidence suggests increased mortality with its use, and so its utilization has declined.

CHRONIC RATE CONTROL

For patients who remain in AF chronically, the goal of rate control is to both alleviate symptoms and prevent deterioration of ventricular function from excessive rates. β -Adrenergic blockers and calcium channel blockers are often used either alone or in combination.