

# Atrial Fibrillation

## Initial Treatment Strategies

The initial management of atrial fibrillation involves controlling the ventricular rate, assessing the need for anticoagulation, and addressing any underlying causes or contributing factors.

- **Rate Control:**

- a. The first step in managing a patient with atrial fibrillation, particularly when presenting with symptoms like palpitations, shortness of breath, and fatigue, is to control the ventricular rate. This is typically achieved with a beta-blocker (e.g., metoprolol) or a non-dihydropyridine calcium channel blocker (e.g., diltiazem or verapamil). These medications help control the heart rate and improve symptoms.

- **Anticoagulation:**

- b. Patients with atrial fibrillation are at increased risk for thromboembolism, including stroke.

- i. The **CHA<sub>2</sub>DS<sub>2</sub>-VASc score** is used to assess the need for anticoagulation:

- Congestive heart failure
- Hypertension
- Age  $\geq 75$  years
- Diabetes mellitus
- Stroke/TIA/Thromboembolism
- Vascular disease
- Age 65-74 years
- Sex category



- **Rhythm Control and Electrical Cardioversion:**

- Electrical cardioversion may be considered in cases where rhythm control is preferred, such as in symptomatic patients or those who cannot be adequately controlled with rate control medications.
- However, cardioversion is not the initial step without ensuring the patient is anticoagulated for at least three weeks or performing a transesophageal echocardiogram to rule out left atrial thrombus.

- **Catheter Ablation:**

- This is typically reserved for patients who have failed medical management with rate and rhythm control or those with persistent symptomatic AF despite therapy.

- References:

- 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: Executive Summary. Circulation
- 2020 ESC Guidelines for the diagnosis and management of atrial fibrillation. European Heart Journal

