

Stroke Prevention in Atrial Fibrillation: In with the New, Out with the Old?

Ralph J. Verdino, MD, FACC

Atrial fibrillation is the most commonly treated arrhythmia. The incidence of atrial fibrillation increases with patient age. Since the population of the United States and many other countries around the world is aging, the prevalence of atrial fibrillation is increasing. Stroke is the major complication associated with atrial fibrillation. For many years, warfarin has been used to decrease the incidence of stroke by over 65%. However, this medication is difficult to take due to its pharmacokinetics and interactions with other medications and dietary changes. Over the past several years, 4 novel oral anticoagulants (NOACs) have been approved in the United States and much of the world. These medications are much easier for patients to take, as routine blood testing is not required, and dosing changes are rarely required.

Many patients who newly require anticoagulation are receiving one of the NOACs, and many other patients are being converted from warfarin to one of the NOACs. This talk will describe some of the difficulties that may be encountered in treating patients with NOACs.

Optimization of AV Interval in CRT: Principle and Practice

Ralph J. Verdino, MD, FACC

Cardiac resynchronization for the treatment of heart failure has been shown to reduce symptoms and improve left ventricular function in the majority of patients with left ventricular dysfunction and prolonged QRS duration undergoing this procedure. For patients in sinus rhythm, pacing with an AV delay that is shorter than the patient's PR interval permits cardiac resynchronization. However, pacing with too short of a delay may worsen hemodynamic function of the heart by failing to allow enough time for the left atrium to contract prior to left ventricular contraction. Optimal AV intervals can change with exercise, sympathetic state, and naturally over time. Different methods of choosing AV intervals for CRT pacing have been studied and are available in many devices. This lecture will describe some of these methods for choosing optimal AV intervals for CRT pacing.