Oral Anticoagulation in Atrial Fibrillation: A Look at ROCKE-T-AF, RE-LY and Warfarin Use

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Rivaroxaban and dabigatran are two newer oral anticoagulant agents that provide clinicians with a viable alternative to using warfarin for patients with atrial fibrillation.

The risk of stroke in patients with atrial fibrillation is increased nearly fivefold.

Data from the Framingham Study have indicated that atrial fibrillation (AF) has a significant impact on the risk of stroke, with a near fivefold increase in stroke incidence in patients with AF. The elderly are particularly vulnerable, with the risk of stroke rising from 1.5% in those aged 50–59 years to 23.5% in those aged 80–89 years. Antithrombotic therapy with warfarin has been proven to be effective in reducing strokes in patients with AF, but is fraught with challenges such as drug and food interactions, the need for regular monitoring owing to the narrow therapeutic window, and bleeding risks.²-⁴

Rivaroxaban, a direct factor Xa inhibitor, and dabigatran, a direct thrombin inhibitor, are two newer oral anti-coagulant agents that provide clinicians with a viable alternative to using warfarin in their patients with AF. The two main efficacy and safety studies looking at these drugs were the ROCKE-T AF² and RE-LY⁵ trials for rivaroxaban and dabigatran, respectively.

Study Design and Patient Demographics

The Rivaroxaban Once Daily Oral Direct Factor Xa Inhibition Compared with Vitamin K Antagonism for prevention of Stroke and Embolism (ROCKET AF) trial was a randomized, double-blind, double-dummy trial (n = 14,264) where patients received either fixed-