

Keep Your Eye on Factor Xa

By Elaine Muchmore, MD

New agents for anticoagulation with enhanced safety profiles and decreased drug interactions have been actively investigated for several decades. The search has been driven by nonvalvular atrial fibrillation, an independent risk factor for stroke that increases with age. Both the narrow therapeutic index of the standard prophylaxis medication, warfarin, and its pharmacokinetics contribute to substantial under-prescribing of the population of patients with nonvalvular atrial fibrillation. This has led to increased morbidity and mortality in patients with atrial fibrillation.

Idraparinux is a medication that can be administered once weekly and requires antithrombin III for action on Factor Xa. In the Plenary Session on Sunday, Dr. Harry R. Buller presented a study randomizing idraparinux to conventional therapy. For the purposes of the study, conventional therapy consisted of either low-molecular-weight heparin or unfractionated heparin, followed by dose-adjusted vitamin K antagonists. Dr. Buller presented data from two separate study populations, one with deep venous thrombosis only and one with pulmonary embolus. The efficacy outcome was incidence of symptomatic recurrent thromboembolism at three- and six-month time-points.

In the deep-vein thrombosis study the incidence of recurrence at three months was the same: 2.9 percent with idraparinux and 3.0 percent in controls; the results were similar at six months. A pre-determined secondary endpoint was bleeding, and they found a slight increase in clinically relevant bleeding in the heparin group at three months (4.5 percent vs. 7.0 percent), but there was no difference by six months. However, in the pulmonary embolism study the incidence of recurrence at three months was 3.4 percent with idraparinux and 1.6 percent in controls. Although the recurrence rate in the control group was unexpectedly low, the lack of equivalence of these agents was nonetheless a surprising result.

Idraparinux is currently being re-evaluated in the population of patients with pulmonary embolism. Its utility in this target population will depend upon the results of that trial.