Troponin Elevation in HF With Preserved Ejection Fraction

The significance of troponin elevation in decompensated heart failure with preserved ejection fraction (HFpEF) is not well established. Pandey and coauthors examined outcomes in 34,233 patients (median age, 79 years) enrolled in the Get With The Guidelines-HF registry from 2009 to 2014. Independent of other predictive variables (including B-type natriuretic peptide levels), elevated troponin levels were associated with higher in-hospital mortality and greater length of stay in 22.6% of patients, as well as increased risk of 30-day mortality, 30-day all-cause readmission, and 1-year mortality. In an Editorial, Sayer and Uriel emphasize that an elevated troponin level identifies a subgroup of patients with HFpEF requiring intensive in-hospital evaluation and treatment followed by rigorous follow-up after discharge.

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Oral Anticoagulation After Pulmonary Vein Isolation

Many patients do not receive guideline-recommended anticoagulation therapy after pulmonary vein isolation for atrial fibrillation. Själander and coauthors evaluated risk of stroke in 1585 patients (mean age, 59 years) in the national Swedish Catheter Ablation Register treated with pulmonary vein isolation from 2006 to 2012 (mean follow-up, 2.6 years). In patients with a CHA2DS2-VASc score of 2 or more, discontinuation of warfarin was associated with a higher rate of ischemic stroke (hazard ratio, 4.6; 95% CI, 1.2-17.2), particularly in those with a previous ischemic stroke (hazard ratio, 13.7; 95% CI, 2.0-91.9). In an Invited Commentary, Marchlinski and Santangeli discuss the ongoing need to identify patients with elimination of atrial fibrillation who can safely discontinue anticoagulation therapy.

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Myocardial Infarction Risk Estimation in Patients With HIV

Despite elevated risk of myocardial infarction (MI) in persons with human immunodeficiency virus (HIV) treated with antiretroviral therapy, optimal methods to predict MI risks remain unclear. Feinstein and coauthors evaluated performance MI risk estimation models in 11,288 adults with HIV since 1995 in the multicenter AIDS Research Network of Integrated Clinical Systems. The 2013 Pooled Cohort Equations adequately discriminated MI risk (C statistic, 0.75; 95% CI, 0.71-0.78). Adding HIV-specific factors did not improve model performance. In an Editorial, Hadigan et al discuss the importance of further research to elucidate the mechanisms and management of cardiovascular disease in the population with HIV.

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Vascular and Lymphatic Inflammation in Patients With HIV

Human immunodeficiency virus (HIV) infection is associated with increased vascular inflammation, and inflammation is also increased within lymph nodes, tissues known to harbor the virus even among treated and suppressed individuals. Tawakol and coauthors performed positron emission tomography in 45 men with HIV and 29 male controls. Axillary lymph node inflammation was higher in men with HIV and was associated with markers of viral disease activity, while arterial inflammation was only modestly increased in men with HIV and was associated with circulating inflammatory biomarkers but not markers of HIV. The dissociation of viral disease activity and arterial inflammation suggests that therapeutic interventions that reduce viral activity may not predictably reduce arterial inflammation and associated cardiovascular disease.