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IN BRIEF

ACUTE CORONARY SYNDROMES

Abciximab plus heparin is not superior to bivalirudin in patients with acute NSTEMI who are undergoing PCI

Results of the ISAR-REACT 4 study have shown that combined therapy of abciximab and unfractionated heparin is not associated with a lower 30-day rate of death, large recurrent myocardial infarction, urgent target-vessel revascularization, or major bleeding than bivalirudin therapy (10.9% vs 11.0%; relative risk 0.99, 95% CI 0.74–1.32, P=0.94) in patients with acute non-ST-segment elevation myocardial infarction (NSTEMI) who were undergoing percutaneous coronary intervention (PCI). However, more major bleeding within 30 days was noted for the abciximab plus heparin group (4.6% vs 2.6%; relative risk 1.84, 95% CI 1.10–3.07, P=0.02). The investigators believe that their results "support the use of bivalirudin as an effective and safe antithrombotic drug during PCI in patients with NSTEMI."

Original article Kastrati, A. et al. Abciximab and heparin versus bivalirudin for non-ST-elevation myocardial infarction. N. Engl. J. Med. doi:10.1056/NEJMoa1109596

VENOUS THROMBOEMBOLISM

Extended prophylaxis with apixaban is not superior to short-course enoxaparin therapy in medically ill patients

The ADOPT trial investigators have reported that 30 days of apixaban thromboprophylaxis is associated with a similar 30-day rate of death related to venous thromboembolism, pulmonary embolism, symptomatic deep-vein thrombosis, or asymptomatic proximal-leg deep-vein thrombosis as 6-14 days of enoxaparin (2.71% vs 3.06%; relative risk 0.87,95% Cl 0.62-1.23,P=0.44) in medically ill patients. Furthermore, by day 30, apixaban was associated with more major bleeding than enoxaparin (0.47% vs 0.19%; relative risk 2.58,95% Cl 1.02-7.24,P=0.04). However, the authors highlight that "the ADOPT trial was underpowered", and believe that, "even though [the] trial was negative, the strategy of extended prophylaxis with apixaban may have promise".

Original article Goldhaber, S. Z. et al. Apixaban versus enoxaparin for thromboprophylaxis in medically ill patients. N. Engl. J. Med. doi:10.1056/ NEJMoa1110899

CORONARY ARTERY DISEASE

CAC score adds no incremental prognostic information to CCTA for cardiovascular events in symptomatic patients

CONFIRM Registry researchers have published findings from a study of 10,037 symptomatic patients who underwent coronary artery calcification (CAC) scoring and coronary CT angiography (CCTA) to assess extent of coronary artery disease. For CCTA-determined stenosis \geq 50%, a CAC score >0 had sensitivity of 89%, specificity of 59%, and negative and positive predictive values of 96% and 29%, respectively. Receiver—operator characteristic curve analysis showed CAC score added no incremental prognostic information to CCTA assessment of coronary artery disease for the composite end point of mortality, myocardial infarction, or late coronary revascularization (areas under the curve for CCTA alone and CCTA plus CAC score were 0.825 and 0.826, respectively; P=0.84).

Original article Villines, T. C. et al. Prevalence and severity of coronary artery disease and adverse events among symptomatic patients with coronary artery calcification scores of zero undergoing coronary computed tomography angiography: results from the CONFIRM (Coronary CT Angiography Evaluation for Clinical Outcomes: An International Multicenter) Registry. J. Am. Coll. Cardiol. doi:10.1016/j.jacc.2011.10.851