View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by Elsevier - Publisher Connector

Topic 06 – Hypertension / Vascular disease

January 15th, Thursday 2015

0074

The stress test as a diagnostic toolfor coronary artery disease in hypertensive patients

Samia Benghazi, Dalila Baghdadi, Rachida Habbal
CHU Ibn Rochd, Cardiologie, Casablanca, Maroc

Introduction: In hypertensive patients, there are multiplecauses of error in the diagnosis of coronary artery disease: The objective of this study was to evaluate the sensitivity of the positive electrical criteria in the stress test in diagnosing coronary artery disease within the hypertensive patients.

Materials/Methods: 120 hypertensive patients with positive stress test underwent coronary angiography.

Results: 33 % of patients had significant coronary lesions and 67% had normal coronary angiography. Two groups of patients were identified: group A (77 patients) withST segment depression in DII, DIII, aVF and V6 with maximal effort and group B (43 patients) with a ST segment depression in DII, DIII, aVF and/or V4, V5, V6 with maximal effort. In group A, 65 patients (84.4%) had normal coronary angiography. In group B, 31 patients (72%) had significant coronary lesions. In a subgroup of 46 patients in group A with persistent ST segment depression in V4 to V6 and recovering for 4 to 6 minutes, 93% of coronary angiograms were normal. In another subgroup of 19 patients in group B with persistent ST segment depressionin V4 to V6 and recovering for 4 to 8 minutes, 16 patients (86%) had significant lesions on coronary angiograms.

Conclusion: hypertensive patients with stress test showing ST segment depression in DII, DIII, aVF and/or V4, V5, V6 on maximum effort and persisting for 4-8 minutes recovering have a high probability of significant coronary artery disease.

0191

Cardiovascular events and bleeding risk associated with intravitreal anti-VEGF monoclonal antibodies: systematic review and meta-analysis

Marie Thulliez (1), Denis Angoulvant (2), Marie Laure Le Lez (1), Annie-Pierre Jonville-Bera (3), Pierre-Jean Pisella (1), François Gueyffier (4), Theodora Bejan-Angoulvant (5)
(1) CHRU Tours, Université F.Rabelais, Ophtalmologie, Tours, France – (2) CHRU Tours, Université F.Rabelais, USCI Cardiologie, Tours, France – (3) CHRU Tours, Pharmacologie, Tours, France – (4) Hospices Civils de Lyon, Université Claude Bernard Lyon 1 & UMR 5558, CNRS, Pharmacologie clinique, Lyon, France – (5) CHRU Tours, Université F. Rabelais, CNRS UMR 7292 GICC, Pharmacologie, Tours, France

Few data exists regarding the systemic safety of intravitreal anti-VEGF monoclonal antibodies (MAb) use in people with neovascular age-related macular degeneration (AMD), diabetic macular oedema (DMO) or retinal vein occlusions (RVO). We performed a systematic review and meta-analysis to evaluate the risk of major cardiovascular (MCE) and nonocular hemorrhagic (NHE) events in AMD, DMO or RVO patients receiving intravitreal anti-VEGF MAb. We included randomized controlled trials (RCT) comparing ranibizumab or bevacizumab to no treatment or non-anti-VEGF treatments, or ranibizumab to bevacizumab, in AMD, DMO or RVO patients. We used fixed effect model and reported results as odds-ratios and their 95% CI. Primary endpoints were major cardiovascular and nonocular hemorrhagic events.

Results: 21 RCT were retrieved (9557 patients). Anti-VEGF-MAb did not significantly increase the risk of MCE events (1.18 [0.81, 1.71]) or NHE (1.42 [0.95, 2.13]) when compared to control. Bevacizumab did not increase the risk of MCE (0.94 [0.59, 1.52]) or NHE (2.56 [0.78, 8.38]) when compared to ranibizumab, but significantly increased Venous Thromboembolic Events (VTE 3.45 [1.25, 9.54]). Subgroup analysis showed a significant increase of NHE in AMD patients in ranibizumab vs control (1.57 [1.01, 2.44]). Anti-VEGF-MAb did not significantly increased overall mortality (1.53 [0.92, 2.56]), cardiovascular mortality (1.29 [0.70, 2.37]), stroke (1.61 [0.85, 3.05]), MI (0.92 [0.54, 1.59]), VTE (1.39, [0.17, 11.38]), or hypertension (0.97 [0.71, 1.32]).

Conclusions: the available clinical evidence showed that anti-VEGF-MAbs were not associated with significant increases in risks of MCE or NHE, but studies and meta-analysis were not powered enough to correctly assess these risks. Increased risks of VTE with bevacizumab and nonocular hemorrhagic events in older AMD patients with ranibizumab should also be cautiously interpreted, as more safety data are needed

0246

Is the measurement of carotid-femoral pulse wave velocity useful in patients with peripheral artery disease?

Victor Aboyans (1), Aida Oueslti (2), Ileana Desormais (2), Thomas Cautres (1), Philippe Lacroix (2)
(1) CHU Limoges, Cardiologie, Limoges, France – (2) CHU Limoges, Hôpital Dupuytren, CTCV, Limoges, France

Purpose: The carotid-femoral pulse-wave velocity (cfPWV) is predictive for cardiovascular events in general population and in patients with coronary artery disease (CAD). Patients with peripheral artery disease (PAD) are high cardiovascular risk, but the interest of cfPWV has never been assessed in this case. We sought to compare cfPWV in severe cases of PAD and CAD, and to assess its prognostic value in the former group.

Methods: From 01/12 to 06/13 we measured cfPWV in patients referred to our hospital either for CABG or for limb revascularization for severe PAD. Patients with CAD with ankle-brachial index <0.90 were excluded. In PAD patients, baseline data and risk factors were compared in those with cfPWV>10m/s vs. those ≤10m/s. During follow-up, the following outcomes were collected: death, amputation and MACE (death, or stroke or myocardial infarction).

Results: We studied 162 patients (76 with PAD and 86 with CAD, age 69 vs. 67 yrs, p=0.25), with similar sex and risk factors distribution, except for diabetes (54% vs 20%, p<0.05). PAD patients had higher cfPWV than those with CAD (11.3±3.7 vs. 9.8±3.0m/s, p<0.007). In patients with PAD, 50% had a cfPWV>10m/s. These patients were older (72 vs. 66 yrs, p<0.001) with higher rates of diabetes (76% vs 56%, p<0.001) than PAD patients with cfPWV ≤10m/s, but did not differ regarding other risk factors. The cfPWV was found lower in the presence of aorto-iliac disease than in case of more distal PAD (9.5±2.5 vs. 11.8±3.9m/s, p<0.001). During follow-up of 10.5±5.7 months of PAD patients, 17.1% deceased, 5.3% had amputation, and MACE occurred in 19.7% of cases. We found no association between cfPWV and events (HR for death: 0.95, p=0.28; HR for amputation: 1.02, p=0.65; HR for MACE: 0.98, p=0.29).

Conclusion: Patients with PAD have stiffer aorta than those with CAD, as assessed by cfPWV, in part due to higher rates of diabetes. However cfPWV is not prognostic in patients PAD. The lower cfPWV in patients with aorto-iliac disease may suggest measurement issues, as this velocity may be decreased because of severe stenosis on the pulse wave trajectory.

0352

R wave in aVL lead is a robust index of left ventricular hypertrophy: a cardiac MRI study

Pierre-Yves Courand (1), Adrien Grandjean (1), Brahim Harbaoui (1), Paul Charles (1), Vinciane Paget (2), Fouad Khettab (1), Giampiero Bricca (3), Loic Boussel (4), Pierre Lantelme (1)
(1) Hôpital de la Croix-Rousse, Cardiologie, Lyon, France – (2) Hôpital Nord Ouest, Cardiologie, Villefranche Sur Saône, France – (3) Génomique fonctionnelle de l'hypertension artérielle, EA 4173, Université Claude Bernard Lyon 1, Villefranche Sur Saône, France – (4) Hôpital de la Croix-Rousse, Radiologie, Lyon, France

Objectives: in patient free from overt cardiac disease and conduction disorders, R wave in aVL lead (RaVL) is better correlated than other ECG indexes with left ventricular mass index (LVMI) assessed with transthoracic

▶

© Elsevier Masson SAS. All rights reserved.