hypertrophy (LVH), analysis of diastolic function and finally the study of the longitudinal strain of LV by speckle tracking technique (calculation GLS). Were excluded from the study patients with secondary hypertension, valvular stenosis or fleeting, arrhythmia, coronary artery disease history.

Results 60 diabetic patients and non-diabetic hypertensive had an LVEF greater than 55% as measured by biplane Simpson method and the conventional method.

LVH was present in 85% of diabetic hypertensive against 45% in non-diabetic. The calculation of LV mass according to the ASE method was used to select 20 diabetic patients with concentric LVH against 5 with eccentric LVH. The LV mass index was higher with an average of 120g/m² in diabetic patients with LVH compared with non-diabetic patients with LVH.

The evaluation of filling pressures by the E/E' showed high pressures in 8 diabetic hypertensive patients against only 3 non-diabetic hypertensive patients. Analysis of longitudinal function by calculating the GLS showed lower rates to 18% in 18 diabetic hypertensive patients against 9 non-diabetic hypertensive patients.

GLS was lower than –18% in eight diabetic patients with filling pressures high. We note in this modest work that LVH was clearly predominant in the HTA arm + diabetes with a consequent decrease in longitudinal contraction index. In diabetic hypertensive patients, LVH was generally concentric. Elevated filling pressures was found in 8 diabetic hypertensive patients against only 3 non-diabetic hypertensive patients, with good correlation with the decrease in the GLS.

Conclusion In conclusion, the evaluation of longitudinal systolic function by 2D strain has an important role in the early detection of subclinical heart disease in diabetic hypertensive patients, and could thus identify patients at high risk of heart failure may benefit from preventive strategies.

The author hereby declares no conflict of interest

0242

Carotid intima-media thickness in the Algerian population: reference ranges and association with cardiovascular risk factors

Hocine Foudad’, Ilyas Bouaguel, Aziz Trichine, Rachid Merghit, Tayeb Adjabi
Hôpital Militaire, Constantine, Algérie
*Corresponding author: hfoudad@yahoo.com (Hocine Foudad)

Introduction and objectives Carotid intima-media thickness as measured with ultrasoundoscopy is an inexpensive and noninvasive predictor of cardiovascular events. The objectives of this study were to determine the population reference ranges of carotid intima-media thickness for individuals aged 35-84 years in Algerian cohort and to analyze the association of carotid intima-media thickness with cardiovascular risk factors (age, smoking, diabetes, pulse pressure, lipid profile, and body mass index).

Methods Population-based cross-sectional study conducted in military hospitals of Constantine and Algiers (Algeria). We described the mean and maximal values of carotid intima-media thickness of the carotid artery and of its 3 segments (common carotid, carotid bulb and internal carotid). We assessed cardiovascular risk factors and analyzed their association with carotid intima-media thickness using adjusted linear regression models.

Results A total of 1547 individuals (54% women) were included, with mean age 58 years. Men showed significantly higher mean common carotid intima-media thickness than did women (0.71 vs 0.67mm). The strongest predictors of this measure were age (coefficients for 10-year increase: 0.65 and 0.58 for women and men, respectively), smoking in men (coefficient: 0.26), high-density lipoprotein cholesterol in women (coefficient for 10mg/dL, increase : –0.08) and pulse pressure in both sexes (coefficients for 10mmHg increase: 0.08 and 0.23 for women and men, respectively). The results were similar for the mean carotid intima-media thickness of all the segments.

Conclusions This population-based study presents the reference ranges for carotid intima-media thickness in the Algerian population. The main determinants of carotid intima-media thickness were age and pulse pressure in both sexes.

The author hereby declares no conflict of interest

0503

Asymptomatic carotid stenosis in patient with acute coronary syndrome: who should be screened?

Audrey Agullo’ (1), Michel Dauzat (2), Iris Schuster (2), Guillaume Cayla (2), Gudrun Boge (2), Thomas Vacter (2), Myriam Akodad (2), Marion Berous (2), Jean-Christophe Macia (2), Florence Leclercq (2)
(1) CHU Montpellier, Arnaud de Villeneuve, Montpellier, France – (2) CHU Nîmes, Nîmes, France
*Corresponding author: audrey.agullo@freesbee.fr (Audrey Agullo)

Background While prevalence and risk factors of carotid stenosis in acute coronary syndrome (ACS) are under investigated, we evaluated patients admitted in our intensive care unit for an ACS in order to define if a screening of this population would be relevant.

Methods Systematic carotid Doppler ultrasound screening was done on 102 consecutive patients admitted to the intensive care unit after an ACS with or without ST elevation. Degree of stenosis was determined using NASCET and hemodynamic criteria. Clinical data and risk factors of atherosclerosis were collected for all patients. The Chi square test was used for categorical variables and ordinal variables were analyzed using Wilcoxon or Student’s tests.

Results Fifty-two percent of patient (n=53) had at least one carotid stenosis. Mild stenosis (>50%) concerned 45 patients (44%) while 6 patients (6%) had moderate (50-69%) stenosis and 2 patients (2%) had severe (>70%) stenosis. As shown in the table, on univariate analysis, the only predictive factors of moderate and severe stenosis were age >75years (OR=11.8; p=0,016), diabetes mellitus (OR=3.9; p=0.05), history of myocardial infarction (OR=11.4; p=0.002) and left ventricular ejection fraction <40% (OR=6.6; p=0.007).

Abstract 0503 – Table: Predictive factors of carotid stenosis >50% in patient with ACS

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>OR</th>
<th>IC 95%</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexe (male)</td>
<td>NA</td>
<td>NA</td>
<td>0.32</td>
</tr>
<tr>
<td>Age &gt;75 years</td>
<td>11.8</td>
<td>1.95-71.5</td>
<td>0.016</td>
</tr>
<tr>
<td>Current smoking</td>
<td>0.15</td>
<td>0.03-0.49</td>
<td>0.047</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>3.9</td>
<td>0.75-15.9</td>
<td>0.053</td>
</tr>
<tr>
<td>Hypertension</td>
<td>3.1</td>
<td>0.7-14.2</td>
<td>0.15</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>1.7</td>
<td>0.43-7.05</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Cardiovascular history

Peripheral artery disease     | 6.57| 0.76-56.8 | 0.09 |
History of stroke or TIA     | 1.89| 0.24-14.9 | 0.95 |
History of myocardial infarction | 11.4 | 2.6-49.35 | 0.002|

ACS initial presentation and coronary angiography results

STEMI                         | 0.3 | 0.06-1.28 | 0.22 |
Multi-vessel lesions          | 3.23| 0.79-13.1  | 0.07 |
Left main artery stenosis     | 3.15| 0.63-15.7  | 0.17 |
Left ventricular ejection fraction <40% | 6.6 | 1.58-27.48 | 0.007|

Conclusion Carotid stenosis is frequent in this population but lesions are often mild and a systematic screening should probably not be recommended. Patients >75 years, diabetics or those with severe coronary artery disease seem however to represent a sub-population at risk to have a stenosis ≥50% in which a screening could be proposed during the hospitalisation.

The author hereby declares no conflict of interest