techniques is still limited. This information is increasingly important because rising costs in the healthcare sector cause healthcare budgets to become more constrained. Outcomes of such economic evaluations are commonly expressed as incremental cost-effectiveness ratios: the difference in costs between two alternatives divided by the difference in effectiveness, where effectiveness can be expressed as quality adjusted life years (QALYs).

Methods: We carried out a systematic review of the literature in order to gain insight in the cost-effectiveness of echocardiography for the detection of CAD compared to ECG, SPECT and coronary angiography. Databases searched included Medline and the NHS EED database for economic evaluations. Sixteen articles were included in the review. Five of these were modelling studies and eleven were empirical studies.

Results: Comparing diagnostic strategies including echocardiography to strategies including stress echocardiography resulted in incremental costs per QALY falling between $180,000 and $1,000,000. Diagnostic strategies including SPECT showed better outcomes than those including echocardiography but at high costs. The incremental costs-effectiveness ratios ranged from $62,800 per QALY to $150,000 per QALY. The cost-effectiveness of coronary angiography compared to echocardiography was found to depend strongly on the prevalence of CAD. In low-prevalence populations the incremental cost-effectiveness ratios ranged from $75,333 to $584,500 per QALY. In high-prevalence populations this ranged from cost-saving to $36,400 per QALY.

Conclusion: Echocardiography as a diagnostic technique tended to be cost-effective when compared to ECG and SPECT. In patients at low risk of CAD, echocardiography stratifying patients before angiography was also found to be cost-effective compared to angiography alone. In patients at high risk, angiography without prior testing was the most cost-effective diagnostic strategy. In general, the studies lacked information regarding the economic parameters. Perspective, price year and justification of methodology were not often provided in the analyzed studies and such economic evaluations did not include the costs of treatment following the diagnostic tests. There is a need for better information about the cost-effectiveness of diagnostic strategies for the detection of CAD.

1111 Assessment of left ventricular systolic dysfunction by tissue Doppler imaging and measurement of plasma type-B natriuretic peptide levels in patients with Emery-Dreifuss muscular dystrophy

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Background: Emery-Dreifuss muscular dystrophy (EDMD) is characterized by myoskeletal abnormalities, quite frequently accompanied by cardiac defects (conduction disturbances and dilated cardiomyopathy). The aim of the study was an analysis of left ventricular systolic dysfunction in EDMD patients (pts) with the use of tissue Doppler imaging (TDI) and plasma natriuretic peptides measurements.

Material and methods: In the present study we included 19 pts with genetically confirmed EDMD (16 pts with an X-linked inheritance [defect in the STA gene] and 3 pts with an autosomal dominant form [defect in LMNA]) and 10 healthy volunteers. Conventional echocardiographic and Doppler parameters for coronary artery disease and in carotid intimal-medial thickness (IMT) were measured in EDMD pts and in 10 control subjects. For each wall, the peak strain (%) and strain rate - SR (s(-1)) were assessed in basal and mid segments.

Results: The mean left ventricular ejection fraction (LVEF) was 52.4±9.3% and 66.4±4.8 for EDMD pts and for controls respectively (p=0.0001). The mean plasma levels of BNP were 24.1±12.27 pg/ml and 6.4±2.1 (p=0.003) for EDMD and controls respectively. We identified two subgroups of EDMD patients: 1 - LVEF<45% (n=7) and 2 - LVEF >45% (n=12) accompanied by group 3 (contROLS, n=10). In group 1 we observed lower SR as compared to group 2 (3.2±1.3 vs 4.9±2.1; p=0.007), but also pts with persistent LVEF (group 2) had lower SR than controls (3.2±1.7 vs 4.9±2.1; p=0.05). Similar differences were observed in the peak strain.

Conclusions: Cardiac dysfuncion is common in EDMD pts. Natriuretic peptides measurements and TDI technique may be useful tools for the assessment of systolic dysfunction. The quantitative assessment of myocardial strain and strain rate can be helpful in the early detection of regional systolic alterations in EDMD pts with normal LVEF.

1112 Correlation of echo measurements and quality of life before and 6 months after pacemaker implantation

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The popularity of pacemaker implantation is increasing year by year. The role of echocardiography was confirmed both before and directly after implantation in e.g. adjusting AV-delay. However, there is no research answering the question - do echo measurements correlate with quality of live (QoL) in the follow-up period?

1113 Gender differences in carotid intimal-medial thickness in patients with suspected coronary artery disease

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Background: The selection of patients for coronary angiography by suspected coronary artery disease represent an important challenge, due to its frequent atypical clinical presentation and false positive rate of non-invasive tests, particularly in women.

Objectives: To evaluate if there is a difference between genders in risk factors for coronary artery disease and in carotid intimal-medial thickness (IMT) for the prediction of coronary artery disease.

Methods: Prospective study of 270 consecutive patients with stable angina submitted to elective coronary angiography, with a mean age of 65±10 years, 35% female. All patients had a coronary ultrasound study. We compared demographic and risk factors for coronary artery disease. The presence of significant coronary artery disease was defined by a stenosis >70%. Carotid IMT was measured by the common carotid artery bilaterally and we considered the highest value between both sides.

Results: Women were elderly, with higher body mass index (BMI) and were less smokers. There were no differences in other risk factors. The prevalence of coronary artery disease, as well as carotid IMT was higher in males. By analysis of ROC curves, the best carotid IMT cut-off for detection of significant coronary artery disease was 1.35 mm (AUC 0.66, 95% CI 0.59-0.73, p<0.001), with a low sensitivity (13%) but high specificity (92%). By logistic regression, in women, carotid IMT was associated with coronary disease (OR 6.87, 95% CI 1.71-41.0, p=0.009), as well as men (OR 3.07, 95% CI 0.99-9.58, p=0.05).

Conclusions: Women with stable angiina had a lower carotid IMT compared with men, as well as lower coronary artery disease prevalence. Carotid IMT can predict coronary artery disease in both genders.

Table 1

<table>
<thead>
<tr>
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<th>Females (n=95)</th>
<th>Males (n=175)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI (kg/m²)</td>
<td>30.2±5.3</td>
<td>27.8±3.7</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Coronary disease (%)</td>
<td>48</td>
<td>76</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Carotid IMT (mm)</td>
<td>0.90±0.35</td>
<td>0.99±0.35</td>
<td>0.05</td>
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1114 Short - time pacing seems to have no acute effects on ventricular functions: A pulsed-Doppler tissue echocardiography and brain natriuretic peptide study

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Background: The unfavorable effects of right ventricular pacing on left ventricular performance have been extensively studied. Tissue Doppler echocardiography (TDE) has recently been reported to be useful for the...