Abstract: P273

The Association between Coronary Artery Disease by Coronary CT Angiography and ASCVD Score with Stable Chest Pain

Authors:
KT Park¹, ¹Myongji Hospital - Jecheon Si - Korea (Republic of),

Topic(s):
Coronary CT Angiography

Citation:

Purpose

The purpose of this study was to evaluate the association of obstructive coronary artery disease (CAD) with atherosclerotic cardiovascular disease (ASCVD) score in outpatients who underwent coronary CT angiography (CCTA) with stable chest pain.

Method

This was a single-center, observational study of 1,156 patients with suggestive of stable angina pectoris who underwent CCTA between July 2016 and June 2018. Patients were eligible for the analysis if they presented with stable chest pain (typical, atypical, or non-specific chest pain) and if CCTA was performed. And we calculated the 10-year ASCVD score.

The presence of obstructive CAD was defined as one or more vessels with ≥50% lumen diameter reduction on CCTA.

Result

Three hundred seventy-seven patients met our inclusion criteria. Patients with a 10-year ASCVD score of 7.5% or greater had significantly more obstructive CAD (81.4%, P < 0.001).

The hazard ratio of obstructive CAD for a 10-year ASCVD score of 7.5% or greater was 3.694 (95% confidence interval: 2.127 to 6.416)

And stable chest pain was correlated obstructive CAD. (Typical angina 47.1%, Atypical angina 27.1%, non-specific chest pain 20.7%, P<0.001)

However, Patients with a 10-year ASCVD score of 7.5% or greater had no associated with chest pain.

Conclusion

Detection of obstructive CAD by CCTA is very useful for outpatients with a 10-year ASCVD score of 7.5% or greater and typical chest pain.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Subgroup</th>
<th>N(%)</th>
<th>CAOD=No</th>
<th>CAOD=Yes</th>
<th>p value</th>
<th>OR (95% CIs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample No (%)</td>
<td></td>
<td>377 (100)</td>
<td>275 (72.9)</td>
<td>102 (27.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASCVD risk</td>
<td>Low(&lt;7.5%)</td>
<td>145 (38.5)</td>
<td>126 (45.8)</td>
<td>19 (18.6)</td>
<td>&lt; 0.001**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>High(≥7.5%)</td>
<td>232 (61.5)</td>
<td>149 (54.2)</td>
<td>83 (81.4)</td>
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ASCVD risk: expressed as sample number and % (computed column-wise), p value computed using Chi-squared test N(%): computed in the total sample or subgroups excluding missing data OR: odds ratio and 95% confidence intervals computed in the subsample of CAOD: No vs. Yes p value* < 0.05, p value** < 0.01

<table>
<thead>
<tr>
<th></th>
<th>Typical angina(n=70)</th>
<th>Atypical angina(n=85)</th>
<th>Non-specific chest pain(n=222)</th>
</tr>
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<tr>
<td>CAOD +</td>
<td>47.1%</td>
<td>27.1%</td>
<td>20.7%</td>
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