ANGIOGRAPHIC VERSUS FUNCTIONAL SEVERITY OF CORONARY ARTERY STENOSIS IN ASIANS

ACC Moderated Poster Contributions
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Abstract Category: 2. Chronic CAD/Stable Ischemic Heart Disease: Clinical
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Background: The relationship between angiographic severity and functional severity of a coronary artery stenosis has not been evaluated in large number of Asian population.

Methods: 1,303 de novo lesions located at the major epicardial vessels (919 patients, male 70.5%, age 63.0±10.2) from Korean 4 center FFR registry were analyzed in this study. FFR ≤0.8 was considered functionally significant. Angiographic severity was assessed by core laboratory quantitative coronary angiography (QCA).

Results: Mean % diameter stenosis and lesion length were 59.3±17.0% and 20.9±11.7mm, respectively. 52.6% of the lesions were located in LAD and 48.2%, in proximal segments. 474 lesions (36.4%) were functionally significant. The best cutoff value to determine the functional significance of a stenosis was % diameter stenosis of 55.5%. Its sensitivity, specificity, positive and negative predictive value to predict the functional significance were 67.3, 67.1, 53.9 and 78.2%, respectively. The proportion of functionally significant stenosis in <50%, 50-70% and >70% lesions was 19.2%, 41.3% and 64.8%, respectively (Table).

Conclusions: In Korean patients, similar degree of discrepancy between angiographic and functional severity of coronary stenosis was observed as in Western patients.

Table. Lesion characteristics per category of angiographic stenosis severity

<table>
<thead>
<tr>
<th>% Diameter Stenosis by QCA</th>
<th>&lt;50% (n=501, 38.4%)</th>
<th>50-70% (n=603, 46.3%)</th>
<th>&gt;70% (n=199, 15.3%)</th>
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<tbody>
<tr>
<td>FFR &gt;0.8</td>
<td>405 (80.8%)</td>
<td>354 (58.7%)</td>
<td>70 (35.2%)</td>
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<tr>
<td>FFR ≤0.8</td>
<td>96 (19.2%)</td>
<td>249 (41.3%)</td>
<td>129 (64.8%)</td>
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<tr>
<td>Mean FFR</td>
<td>0.87±0.09</td>
<td>0.81±0.10</td>
<td>0.73±0.14</td>
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