

JCK Oral

JCK Oral 4 (II-JCKO4)

Kawasaki Disease/General Cardiology 1

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Sat. Jul 8, 2017 3:30 PM - 4:20 PM ROOM 3 (Exhibition and Event Hall Room 3)

3:30 PM - 4:20 PM

[II-JCKO4-01]Severity assessment of coronary artery aneurysms in Kawasaki disease using the internal diameter Z-score

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BACKGROUND The Z-score of the internal diameter has recently been used to classify coronary artery aneurysms (CAA) in Kawasaki disease (KD), but its predictive value for coronary events (CE) is uncertain.

OBJECTIVES The aim of this study was to clarify the relationship of the Z-score to time-dependent CE occurrence in KD patients with CAA.

METHODS We surveyed 1,006 consecutive KD patients aged less than 19 years old, who received a coronary angiography between 1992 and 2011 in Japan. The time-dependent occurrence of CE including thrombosis, stenosis, obstruction, acute ischemic events, and coronary interventions was analyzed for small (Z-score <5.0), medium (≥ 5.0 to <10.0), and large (≥ 10.0 or actual internal diameter ≥ 8.0 mm) CAA.

RESULTS The 10-year event-free survival rate for CE was 100.0, 96.0, and 66.2% for the right coronary artery (RCA) ($p < 0.001$), and 100.0, 95.7, and 65.2% for the left coronary artery (LCA) ($p < 0.001$), for small, medium, and large CAA. Cox regression analysis revealed that large CAA (hazard ratio 6.49, 95% confidence interval 3.44 - 12.25) and male gender (3.10, 1.63 - 5.89) were independent risk factors for CE in the RCA. Similarly, large CAA (6.34, 3.19 - 12.59) and male gender (2.40, 1.12 - 5.16) were independent risk factors for CE in the LCA.

CONCLUSIONS In KD patients, a large CAA based on the internal diameter Z-score and male gender were independent risk factors for CE. Male KD patients with a large CAA should be carefully observed to prevent CE.