IMPACT OF PAN-CORONARY PLAQUE CHARACTERISTICS ON TRANSIENT SLOW FLOW PHENOMENON DURING PCI

Poster Contributions
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Background: It was reported that patients with acute coronary syndrome (ACS) frequently have vulnerable plaques in the remote coronary arteries, suggesting ACS is a part of the pan-coronary process. In addition, MDCT allow us to assess not only culprit lesion but also whole coronary trees. However, the impact of vulnerable plaques in remote coronary arteries on the occurrence of transient slow flow phenomenon (SF) during percutaneous coronary intervention (PCI) is still unclear.

Methods: Consecutive 180 patients with angina diagnosed by 128-slice MDCT before coronary interventions were enrolled. Non-culprit lesions were defined as plaques with more than 25% diameter stenosis measured by quantitative angiography that had not been treated. The CT value of plaque, remodeling index, and prevalence of napkin-ring sign on the culprit and non-culprit lesions assessed by MDCT were compared between patients with and without transient slow flow during PCI.

Results: Of total 180 patients, 44 patients (24.3%) had SF during PCI. Based on ROC analysis, low attenuation plaque was defined as a plaque with its plaque CT value below 42HU. Positive remodeling was defined as remodeling index >1.1. The result showed in the table.

Conclusion: Assessment of plaque characteristics not only on the culprit lesion but also non culprit lesion by MDCT might allow us to predict SF during PCI more accurately.