Summary

Comparison between Unstable Angina Pectoris and Stable Effort Angina Pectoris by Using $^{123}$I-BMIPP and $^{201}$Tl Myocardial SPECT

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We performed BMIPP myocardial SPECT and Tl myocardial SPECT in patients with unstable angina (UAP) and stable effort angina (SAP), and compared the results for the two groups. Our subjects were 30 patients with the UAP and 25 patients with the SAP. The early and delayed images of the BMIPP were obtained with patients at rest. The early image of the Tl alone was obtained with patients at rest. We calculated severity score (SS) using the polar map based on SPECT short-axis image on the both myocardial SPECT. And, we calculated % uptake of the responsible coronary lesion and regional washout rate (WR) on myocardial SPECT with BMIPP. On coronary angiogram, no difference in % diameter stenosis was seen between the two groups. On myocardial SPECT with Tl, no difference in the SS was seen between the two groups. However, on myocardial SPECT with BMIPP, the SS was significantly higher score in the UAP group than in the SAP group. And, on myocardial SPECT with BMIPP, the % uptake and the WR were significant lower values in the UAP group than in the SAP group. Even if the two groups have almost the same level of myocardial perfusion disorder, the UAP group may have severer myocardial fatty-acid metabolic disorder than the SAP group, because the defects in BMIPP were significantly severer in the UAP group.

Key words: $^{123}$I-BMIPP, $^{201}$TlCl, Unstable angina pectoris, Stable angina pectoris.