

Of the 16 patients without apical image defect, 9 patients had apical abnormal motion. Thus, our studies suggest that regions of anterior,

apical, lateral and inferior image defects correspond with the regions of left ventricular abnormal motions.

### **Study on Myocardial Scintigraphy in Patients with Myocardial Infarction (VI) Comparison of Regional Myocardial Detection by Thallium-201 with Coronary Angiography**

Kinji SAKUYAMA\*, Yoshitaka KAWAI\*, Takashi KOIDE\*, Yoshihito NOMURA\*, Nagao YASUTOMI\*, Yorihiisa MITANI\*, Mitsumasa OHYANAGI\*, Tadao YAMAMOTO\*, Yoshio SAITO\*, Tadaaki IWASAKI\*, Susumu YORIFUJI\* and Minoru FUKUCHI\*\*

*\*Department of Internal Medicine, Hyogo College of Medicine, Hyogo*

*\*\*Department of Radioisotope, Hyogo College of Medicine, Hyogo*

Myocardial scintigraphy was performed after intravenous injection of Thallium-201 at rest in 31 patients with myocardial infarction and the results were compared with coronary angiographic findings. Each finding was interpreted independently by each observer.

All 18 patients with antero-septal myocardial infarction had image defects and more than 75 percent stenosis of the left anterior descending artery. Of the 4 patients with antero-septal image defects, 3 patients revealed 90 percent stenosis of the left anterior descending artery. Of the 11 patients with from antero-septal to apical image defects, 6 patients had 90 percent stenosis, 3 patients had complete occlusion of the left anterior descending artery. Of the 3 patients with from antero-septal, apical, lateral to apico-inferior image defects, one patient had 90 percent stenosis, 2 patients had complete occlusion of the left anterior descending artery.

In 13 patients with inferior myocardial infarction, of the 4 patients with mainly posterior image

defects, one patient had not significant stenosis, two patients had more than 75 percent stenosis and one patient had complete occlusion of the circumflex artery. And 2 patients had no significant stenosis 2 patients had 90 percent stenosis of the right coronary artery. Of the 9 patients with postero-inferior image defects, 4 patients had no significant stenosis, 5 patients had more than 75 percent stenosis of the circumflex artery. And only one patient had no significant stenosis, 8 patients had more than 75 percent stenosis of the right coronary artery.

Thus, our studies suggest that when the image defects of the patients with antero-septal myocardial infarction were larger, the degree of the stenosis of the left anterior descending artery was severer. In the patients with inferior myocardial infarction posterior image defects were usually associated with the circumflex artery stenosis and postero-inferior image defects associated with the right coronary artery stenosis.

### **<sup>201</sup>Tl Myocardial Scintigraphy for the Patients of Myocardial Infarction**

Shinobu SHIIBA\*, Atsushi OKUYAMA\*, Seiichi HOSOI\*, Huminori HIKITA\*, Sachio SHIDA\*, Hiroshi NISHIKAWA\*, Kazuyoshi HONDA\*, Masaaki KARASAWA\*, Zyunichi YUKUTAKE\*, Hideyuki WATANABE\*, Tatsuo KUMAZAKI\*, Yoshihiko YAMAGISHI\*, Tatsuo SAITO\*, Jungi MUNAKATA\*\*, Kyoichi MIZUNO\*\*, Masakuni KANAZAWA\*\*, and Kazuo MUNAKATA\*\*

*\*Nippon Medical School Department Radiology, \*\*Internal Medicine*

Object; The myocardial scintigraphy with <sup>201</sup>Tl Cl is practised in the cases of myocardial infarction. The scintigrams are compared with ECG,

coronary angiography and left ventricle graphy.

Subject and method; 42 cases were studied of myocardial scintigraphy in our department from