September 1976 till June 1977, the 42 patients were practised ECG, coronary angiography and left ventriculography within the following months. The 42 cases consist of 31 males and 11 females, and the age extends from 26 to 78.

15 minites after 201TICI 2mCi intravenous injection, the scintigraphy was performed anteroposterior view, left anterior view (30, 45, 60) left lateral view, and right anterior view.

Results:
1. In all cases, fine myocardial image could be seen, and area of infarction was manifested as low activity area.
2. In comparison with ECG in 18 cases were absolute identity, in 19 cases were nearly indentity, in 5 cases were not identity.
3. In comparison with coronary angiography, 16, 18 and 8 cases, each.
4. In comparison with left ventriculography, 13 18 and 11 cases, each.
5. Usefulness of this examination recognized the area of myocardial infarction with no side effects is emphasized.

Complex Examination of Myocardial Ischemia with 201TICI and 99mTc-Diphosphonate
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Fifty-two patients with clinical and documented electrocardiographic features of ischemic heart disease have undergone complex examination with Thallium-201 and Tc-99m-Diphosphonate, left ventriculography and selective coronary angiography within a week.

Myocardial imaging could be obtained from 5 minutes after intravenous injection of Thallium-201.

Normal Thallium-201 myocardial images were not all homogeneous and one case without myocardial infarction showed decreased activity of nuclide at apex. Other examinations of this case were all within normal limits.

It was necessary to take multiple images in various projection in order to detect the location and size of the myocardial ischemia.

Of 34 lesions in 25 patient with old myocardial infarction, twenty-eight were detected sufficiently the location and size of the lesions by Thallium-201 myocardial imaging as compared with the findings of selective coronary angiogram, left venticulogram and electrocardiogram.

Right ventricle was fairly well visualized in cases with right ventricular overload.

Three way stopcock method which used right femoral vein, produced a good bolus injection.

RI angiocardiography with Tc-99m-Diphosphonate was taken at a rate of 5 fps and recorded for 20–30 seconds and was useful for indirect evidence of existing of myocardial infarction.

The series of Tc-99m-Diphosphonate myocardial scintiphoto were obtained in six different projection from 4 to 5 hours after administration of nuclide.

Tc-99m-Diphosphonate myocardial imaging was visualized as positive image not only in acute myocardial infarction but also in old one. One patient who passed 82 days after onset of myocardial infarction, showed positive imaging with Tc-99m-Diphosphonate.

It was difficult to distinguish by myocardial scintiphoto using Tc-99m-Diphosphonate whether the myocardial infarction was acute or old.

Myocardial imaging with Thallium-201 and Tc-99m-Diphosphonate, and RI angiocardiography are simple, safe and reliable method to detect and to localize myocardial ischemia, and are helpful to estimate the ischemic size.