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THE COMPARISON STUDY BETWEEN IN-111-LABELLED PLATELET SCINTIGRAM AND ANGIOGRAM.

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In-111-oxine labelled platelet scintigram can reveal the sites of active intravascular platelet deposition. In-111-oxine labelled platelet scintigram depicted patched deposition into a large aneurysm. To find the cause of the patched deposition, we compared the In-111-oxine labelled platelet scintigram with angiogram. Sixteen case of abdominal aneurysm, 6 cases of thoracic aneurysm, and a case of basillar and leg aneurysm were studied. A small aneurysm showed uniform activity, whereas a large aneurysm showed patched deposition. At the site of patched deposition in the aneurysm, abnormal blood flow such as whirl and stagnant flow were shown by angiogram. The area of patched deposition of In-111-oxine labelled platelet scintigram corresponded well to the area of abnormal blood flow and active thrombus formation.

In-111-oxine labelled platelet scintigram can reveal not only the area of active thrombus formation but also the blood flow abnormality by its patched deposition.

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EVALUATION OF IN-111 TROPOLONE PLATELET SCINTIGRAPHY IN THE AGED.

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In-111 platelet scintigraphy was performed to assess the clinical usefulness for diagnosis of thrombi in 16 aged patients, who could not be received a certain invasive investigation due to advanced age or complication of the other diseases. Platelets were labeled by Yui's method. Recovery rate, labeling rate and purity of labeled platelets were calculated. The measurement of mean survival time of platelets was carried out by recommended methods for radioisotope platelet survival study. In 13 out of 16 patients (81.3%) scintigrams showed "hot lesion". Ten out of them showed prominent accumulation of labeled platelets. In 6 cases, hot lesions suggesting thrombi in the artery or atherosclerosis were detected at unexpected regions beforehand. Recovery rate, labeling rate and purity were calculated as 82.4%, 61.1% and 96.1%, respectively. Platelets survival curves of all cases were assessed in two groups: linear decay type and exponential decay type. But no prevalence of exponential decay was observed in cases with abnormal accumulation. In-111 tropolone platelet scintigraphy is clinically useful to assess the detection of thrombi with and without expected lesions in the aged.