

Depiction of residual emboli following pulmonary embolism with thrombotic scintigraphy

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Background: In the treatment of pulmonary embolism (PE), the presence of residual emboli is known to seriously affect the recurrence and prognosis. We attempted to depict the residual emboli in the subacute stage of PE using indium-111-oxine labeled platelet scintigraphy (In-plt). **Methods:** In-plt was performed on 22 patients with PE who showed an improvement according to lung perfusion scintigraphy. Their accumulation was assessed along with the blood coagulation ability measured on the same day. In addition, radioisotope venography (RI-veno) was performed simultaneously with In-plt to measure the circulatory findings in the lower limb for comparison. All patients received systemic heparin during the acute stage and received warfarin at the time of testing. **Results:** Accumulation of In-plt was observed in 7 patients (32%), and positive signals were found in the lower limbs or pelvic cavity in all cases. Two patients were suspected of having poor lower limb circulation from their RI-veno findings, and these findings were largely consistent with the areas of In-plt accumulation. **Discussion:** Some emboli persist after extensive anti-coagulation therapy. The use of In-plt is effective in determining the therapeutic measures and assessing the prognosis as this method allows us to clearly depict the existence of such emboli.

Key words: platelet scintigraphy, pulmonary embolism, radioisotope-venography