

Tchnetium-99m-tetrofosmin imaging of lung cancer: Relationship with histopathology

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Tc-99m-tetrofosmin is an agent to delineate cancer. To elucidate the usefulness of Tc-99m-tetrofosmin scintigraphy, we analyzed the relationship between the uptake of Tc-99m-tetrofosmin and histopathology in patients with lung cancer. SPECT studies were conducted twice: 15 minutes (early scan), and 60 minutes (delayed scan), after intravenous injection of 740 MBq Tc-99m-tetrofosmin. We calculated the retention index in order to evaluate the degree of Tc-99m-tetrofosmin retention in the primary tumor. The retention indices were significantly lower in squamous cell carcinoma than those of small cell carcinoma or adenocarcinoma. As the retention indices of Tc-99m-tetrofosmin were different in each histopathology, the index might play a part as a tumor marker of lung cancer.

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