

G₂. Lung

Abnormal Pulmonary Perfusion and Ventilation In Aged Patients Studied by Lung Scintigraphy

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We have reported previously that two kinds of characteristic scan findings were frequently observed in geriatric patients besides the multiple perfusion defects. These findings include the major fissure sign and the decreased perfusion, particularly, in the lower lung field.

The incidence of fissure sign was 41% and that of the decreased perfusion to lower lung field was 22% respectively in 240 geriatric subjects.

This time for the purpose of further study to elucidate the cause of these perfusion defects, inhalation scannings were performed with 99m Tc-phytate inhalation using ultrasonic nebulizer in patients who were also studied by perfusion scanning. Sixteen cases, including five cases with emphysema, two cases with pulmonary fibrosis,

four cases with Takayasu disease and etc were investigated.

Results: Aerosol accumulation was decreased in the pulmonary area and/or in the major fissure of the aged cases where pulmonary arterial perfusion is decreased in the perfusion scanning. On the other and, radioactive aerosol was well inhaled and distributed uniformly in the patients with Takayasu's disease who showed frequently large pulmonary perfusion defects.

In conclusion, two characteristic findings of the pulmonary scan observed frequently in the aged patients were probably caused by the disturbance secondary to airway involvements including alveoli rather than by primary obstruction of pulmonary arteries.

Evaluation of Impedance Pulse by Lung Scintigraphy Detectability of Blood Shift After Bronchography

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Possibility of impedance method to detect the blood shift between both lungs after broncho-

graphy was studied by comparison with the results of lung perfusion scanning.