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Present diagnostic strategies for acute pulmonary thromboembolism; results of a questionnaire in a retrospective trial conducted by the Respiratory Nuclear Medicine Working Group of the Japanese Society of Nuclear Medicine

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The aim of this study is to re-evaluate and clarify the diagnostic role of ventilation/perfusion lung scintigraphy in Japan, now that single-detector-row helical CT and multidetector-row CT are available in clinical practice. The Respiratory Nuclear Medicine Working Group of the Japanese Society of Nuclear Medicine distributed a questionnaire to institutions in Japan equipped with scintillation cameras as of September 2001. Of 1,222 institutions, 239 returned effective answers (19.6%). The most frequent combination for initial diagnosis of acute pulmonary thromboembolism was chest radiography, perfusion lung scintigraphy, and contrast-enhanced CT (111 institutions, 46.4%). The questionnaire revealed that the validity and usage of perfusion lung scintigraphy and those of contrast-enhanced CT were equivalent in the present clinical situation. On the other hand, the diagnostic value of ventilation lung scintigraphy in suspected pulmonary thromboembolism has not been established in Japan. Even though contrast-enhanced CT is widely used in Japan, perfusion lung scintigraphy is still required to determine disease severity and monitor its progress.

Key words: questionnaire, pulmonary thromboembolism, perfusion lung scintigraphy, ventilation lung scintigraphy, contrast-enhanced helical CT