Summary

Current Utilization of Gated SPECT in Japan

The Working Group of The Japanese Society of Nuclear Medicine

The circumstances for gated SPECT in Japan were surveyed by the working group of the Japanese Society of Nuclear Medicine, using a questionnaire method. The questionnaire included the following items; 1) proportion of the gated SPECT, 2) indication, 3) radiopharmaceuticals, 4) study protocols, 5) unsuccessful cases, 6) data acquisition, 7) reconstruction methods, 8) software, and 9) reliable parameters. The questionnaires were sent to 345 institutions and were returned in 180 (52%), 177 of which used gated SPECT. Gated SPECT was mainly used for ischemic heart disease, exercise-rest or rest studies with ^{99m}Tc-myocardial agents were used in most of these patients. QGS software was used mostly for gated SPECT processing. Common parameters used in gated SPECT were ejection fraction, end-diastolic and systolic volume. The incidence of successful case for gated SPECT was 6.8% which patients had arrhythmia, large infarct, small heat, and high liver accumulation.