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APPLICATION OF P-WAVE GATING TO MULTIGATED CARDIAC POOL SCAN AS MORE CONVENIENT METHOD TO ASSESS ATRIAL CONTRACTION.

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With routine multigated blood pool scan, the reliability during late diastolic phase is reduced because of statistical changes in R-R interval. We devised P-wave gating equipment applicable for multigated cardiac pool scan to assess the atrial contribution to left ventricular filling (AC/SV). This equipment designed to detect P-wave accurately was made up with several parts such as differential amplifier, low pass filter, squaring amplifier and masking circuit. With P-wave gating, the normal range of AC/SV was compatible with the previous reports with other methods, and hypertensive and HCM groups showed greater AC/SV than control group. It appears that P-wave gated scan is more convenient method to assess atrial contribution than other methods such as second sound gating or R-wave retrograde acquisition technique, and applicable without limitations in hardware capacities.

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