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


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.