

# Myocardial contraction and ventricular function in normal subjects evaluated with isotopic ventriculography and phase analysis Contracción cardíaca y función ventricular en sujetos normales evaluada con ventriculografía isotópica y análisis de fase.

Kandora,

González,

Lillo,

Massardo,

Ortiz,

Asenjo,

Oyarzún,

Aramburu,

Loureiro,

Otárola,

Normal heart contraction was studied in 20 healthy subjects (14 males and 6 female, mean age 33 years). Rest radioventriculography and phase analysis were used. Ejection fraction was  $66 \pm 7\%$  for the LV and  $53 \pm 7\%$  for the RV ( $p < 0.0001$ ). Peak filling rates in the first third of diastole were  $1.6 \pm 0.6$  EDV/sec for the LV and  $0.7 \pm 0.3$  EDV/sec for RV ( $p < 0.0001$ ). Time to peak filling rate normalized for heart rate was  $180 \pm 52$  ms for the LV and  $203 \pm 60$  ms for the RV ( $p = 0.05$ ). Filling fractions were  $23 \pm 10\%$  and  $9 \pm 3\%$ , respectively ( $p < 0.0001$ ). Segmental motility was normal in all subjects. Phase analysis revealed faster emptying of the left atrium with phase angles of  $171 \pm 13$  degrees in the LA and  $185 \pm 12$  degrees in the RA ( $p = 0.00007$ ). This difference may be related to faster diastolic events in the left ventricle. Phase angles for the LV and RV were  $-8.75 \pm 3$  and  $-9.44 \pm 5$  degrees, respectively (NS). We conclude that activation occurs earlier in the le