The purpose of this research was to compare structural variations and performance of left ventricle heart of athletes in regular practice and long time practice lack. In this research, 30 female athletes were selected. Two groups of 15 females playing basketball and aged 18–29 years in regular and long time practice lack groups were formed in Khuzestan. Some variables in these two stages of test were stroke volume, ejection fraction, heart rate and end systolic diameter that were evaluated by 1D, 2D and Doppler methods in rest situation. The main result of this article is positive effect of regular practice for basketball in performance of left ventricle paid and analysed in the paper.