

Background: Dilated cardiomyopathy (DCMP) is one of the disabling diseases all over the world including Iraq, and especially Basrah. It affects different age groups and both sexes.

Aim: to see the effect of optimization of heart rate on left ventricular ejection fraction and average global longitudinal strain. **Methodology and the Results:** 33 patients with dilated cardiomyopathy (DCMP) are enrolled in this study from February 2019 to May 2021, their mean age was 39.6 year, 51.52% were male and female constitute 48.48%, the mean heart rate of those patients at the first visits was 102 beat per minute, the mean of their left ventricular ejection fraction (LVEF) at that time was 31% and the mean of their average global longitudinal (GLS) was -7%. That patient was treated by antifailure treatment with optimization of their heart rate, after 2 months of treatment their mean heart rate was significantly decrease to 76 BPM (P value < 0.001), however in spite of improvement in the functional capacity there was no significant correlation between the optimization of the heart rate and the LVEF (P value 0.317), on the other hand there was significant correlation in the average GLS after optimization of the heart rate (P value <0.006).

Conclusion: optimization of the heart rate associated with improvement in the functional capacity and GLS. GLS estimation is better than LVEF estimation in the assessment of LV function.