Complementary supportive therapy for symptomatic patients with left ventricular dilatation and reduced ejection fraction

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Introduction: The aim of the study was to assess the effect of complementary supportive therapy (CST) on the quality of life and functional capability in patients with heart failure and reduced ejection fraction (HFrEF).

Patients and Methods: We investigated 33 patients with left ventricular dilatation (LVIDd> 60 mm) and reduced ejection fraction (EF <40%) in 76 complementary supportive therapy (CST) periods. Prior to each CST period, therapy was optimized (OMT) for one month. CST consists of a 10-day session. In addition to OMT, the patients were treated with carnitine, L-arginine, magnesium, thiamine, riboflavin, pantothenic acid, niacin, pyridoxal, biotin, lipoic acid, coenzyme Q-10, vitamin E, vitamin C, selenium while lying for 30 minutes inside a pulsating electromagnetic field with intensity up to 30 microteslas and inhaling negatively ionized oxygen. Before and after each CST period, patients were asked to evaluate the quality of life using the Minnesota Living with Heart Failure Questionnaire (MLHFQ) and the visual analogue scale and EF, LVIDd and NYHA classes were determined. Statistical analysis was based on the t-test, Spearman's rank correlation coefficient and Wilcoxon's signed-ranks test. The longest observation period was 122 months.

Results: After administering the complementary supportive therapy, a statistically significant improvement (p<0.05) was noticed in the particular items of the MLHFQ, in emotional and physical dimensions. The values of VAS and EF increased whereas NYHA and LVIDd decreased significantly (p<0.001).

 ${\bf Conclusion}: {\rm CST}$ significantly improved the quality of life and functional capacity in patients with ${\rm HFr}{\rm EF}^{1,2}$

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