

The heart failure patients' functional condition impact on the changes in cardiac biomarkers

Authors: Simona Dužinaitė
Olesia Ivanova,
Doctoral degree Jolanta Laukaitienė

INTRODUCTION

A heart failure (HF) program is one of the main long-term follow-up HF management strategies. The program includes different types of tests, as well as the European heart failure self-care behavior scale. Moreover, the efficacy of self-care on cardiac function could be estimated by the results of the NT-proBNP biomarkers.

METHODS

- The study included 99 patients with HF who had completed all 4 visits of the HF program.
- The data was retrospectively enrolled into the study from the first and last visits.
- Patients were divided into two groups (< 60 years and ≥ 60 years).
- The results of the self-care behavior scale and their changes during the first and fourth visits were evaluated. Cardiac dysfunction was also analyzed according to NT-proBNP.
- The correlation between the questionnaire results and NT-proBNP was evaluated.

CONCLUSIONS

- The relationship between the self-care questionnaire and NT-proBNP results at the first and last visits was found to be statistically significant in both age groups.
- Self-care behavior scale result changes weakly correlate with NT-proBNP changes in patients older than 60 years.

AIM

To investigate the self-care behavior scale and NT-proBNP results before and after 4 visits of the HF program and the correlation between the scale and NT-proBNP.

RESULTS

- Self-care behavior scale results:

Age group	1st visit	4th visit	Significance
<60	30	22	P<0.05
≥60	29	24	P<0.05

- NT-proBNP results:

Age group	1st visit (pg/mL)	4th visit (pg/mL)	Significance
<60	921.5	614.5	P<0.05
≥60	1961	1526	P<0.05

- A weak correlation was found between self-care behavior scale and NT-proBNP result changes during 4 visits of the HF program in patients older than 60 years ($r=0.29$, $p<0.05$).