

M.Beresnevaite

Zarządzanie stresem u pacjentów kardiochirurgicznych, randomizowane kontrolowane badania kliniczne

Stress management In Cardin burglary patients randomised controlled clinical study

Beresnevaitė M^{*}, Benetis R.^{*}, Rasinskiene S.^{**}, Stankus A.^{***}

^{*}Laboratory of Clinical Cardiology, Institute of Cardiology, Lithuanian University of Health Sciences

^{**}Kaunas Vytautas Magnus University

^{***}Institute of Psychophysiology and Rehabilitation, Lithuanian University of Health Sciences

Effects of psychological interventions in cardiac surgery have mostly been studied with a focus on presurgical interventions. This study is controlled trial of psychotherapy efficacy over nine months in patients who had underwent coronary bypass surgery and coronary bypass combined with valve procedure surgery.

Objective: to examine the efficacy of cognitive behaviour therapy (CBT) for stress management according to the changes in psychological status, quality of life and autonomic heart rate control.

Methods: the CBT and control groups both consisted from 36 patients. Therapy course lasted nine months (18 sessions). The Symptom Checklist – 90 Revised (SCL-90R) and Short Form Medical Outcomes Study Questionnaire (SF-36) were administered to patients at 2 and 12 months after surgery. The heart rate variability (HRV) parameters were investigated by ECG registration for five minutes at rest and by heart rate reaction to active orthostatic test. The final analy-

sis was done for 12 control group pts and for 19 therapy group patients.

Results: the CBT patients' means scores of all SCL-90R 12 scales was positive, statistically significant change was found in anxiety scale ($p < 0.05$). The number of patients with high hostility, anxiety and distress scores decreased significantly ($p < 0.05$, $p < 0.01$ and $p < 0.05$ appropriately). It was found also that the quality of life according to the mean scores of all nine SF-36 scales had positive dynamics; the significant change was found only in three scales: role limitation due to emotional problems ($p < 0.001$), social function ($p < 0.05$) and pain ($p < 0.05$). The results have shown significant changes in some HRV parameters dynamics: the mean of heart rate, the number of patients with low general heart rate variability and the number of patients with shortened heart rate reaction to active orthostatic test have decreased ($p < 0.05$); the mean of general heart rate variability and the mean of heart rate reaction duration (in milliseconds) have increased ($p < 0.05$).

In the control group the means scores of the two SF-36 scales had negative dynamics, other ones have changed positively, but not significantly. It was found that the change in the most mean scores of SCL-90R scales also was negative. The analysis have shown that the parameters of HRV didn't change in this group.

Conclusion: this study demonstrated that CBT for stress management has a moderate effect on psychological status, quality of life and autonomic heart rate control in cardiac surgery patients. Further studies with larger number of subjects are needed.