Extended abstract

Cardiovascular rehabilitation dose for patients after their first myocardial infarction

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Introduction: The cardiovascular rehabilitation (CVR) is one of the measures of secondary preventions that is proven to have a positive effect on survival and life quality of cardiovascular patients[1,2]. The goal of this research was to determine whether there are differences in recovery of patients after their first acute myocardial infarction (AIM) depending on their demographic variables as well as engagement of cardiovascular rehabilitation.

Patients and Methods: The data of consecutive patients, who were included in CVR programme at the Institute for Cardiovascular Prevention and Rehabilitation in Zagreb after their first AIM during the period between September 10, 2015 and September 10, 2019 were analyzed. The analysis included demographic data, onset of programme considering the time of AIM, exercise stress test (EST) results, and dose of medical gymnastics.

Results: 474 AIM patients, 356 being male (75.1%) and 118 being female (24.9%) were included in the programme. The average age of men was lower than that of women (62 ± 9.8 vs 65 ± 8.6 years). The patients in age group 30 to 50 started their CVR programme sooner than the patients older than 70 years (69.5 ± 41.9 vs 106.7 ± 75.4 days). Significantly better recovery and EST results, measured with ≥2 MET change at discharge, were shown by 59.3% of patients, mostly men (66.0 vs 38.3

%). The average engagement of medical gymnastics was 24.3 ± 8.3 hours, and patients in the age group 30 to 50 years old, as well as those at the age of 51 to 60 were more regular at their medical gymnastics than 61 to 70 or older patients (26.3 vs 25.9 vs 23.6 vs 21.9 attendances). The regression analysis stated that the male gender and medical gymnastics dose were closely tied, while the age stays negatively to the possibility of EST results improvement during discharge.

Conclusion: The prompt inclusion in CVR programme and regular participation in its components, especially medical gymnastics[3], leads to better EST results during patient discharge.

KEYWORDS: acute myocardial infarction, cardiovascular rehabilitation, physical activity.

Literature

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