Long-term exercise program in cardiovascular patients: the impact on quality of life

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Introduction: The benefits of Phase 2 cardiac rehabilitation is well-established in terms of improving functional capacity, quality of life, and even prognosis. The impact of a long-term exercise program is less established.

Purpose: To assess the impact of a maintenance exercise program after Phase 2 of cardiac rehabilitation on quality of life.

Methods: A single-center cohort study was conducted, involving patients (pts) who completed a phase 2 CR program at least 6 months prior to the study and answered the 36-Item Short Form Survey (SF-36) telephonically. The participants were categorized into 2 groups based on their progression to phase 3 programs: Group 1, comprising those who continued exercising in a specialized cardiac rehabilitation center or local gym, and Group 2, encompassing those engaging in any form of exercise. Scores were assigned to eight health domains, and overall scores were compared between the two groups.

Results: A total of 110 pts were included (78% male; mean age of 61.5 ± 11 years). They were initially referred for ischemic heart disease (86%). Regarding clinical data, 59% had hypertension, 10% were diabetic, 79% had dyslipidemia and 20% were smokers. Regarding progression to Phase 3 of CR, 51% of pts maintained physical exercise (group 1).

When analyzing each of the eight domains of health, the group 1 had a higher overall score on the following domains: functional capacity (90±14 vs 85±25, p=0.014); bodily pain (100±0 vs 100±25), p=0.026); vitality (68±15 vs 61±16, p=0.021) and mental health (88±12 vs 80±20, p=0.013). Additionally, we noted a tendency for higher scores in the remaining domains, although not statistically significant.

Subgroup analysis of ischemic pts showed similar results in functional capacity (p=0.017), bodily pain (p=0.009) and vitality (p=0.025). These results were independent of gender and body mass index.

Conclusion: Our study highlights the importance of maintaining a physical exercise program after phase 2 of cardiac rehabilitation in terms of quality of life, particularly in domains crucial to daily functioning and mental well-being.