The perceived exertion during rehabilitation can be a useful tool for personalizing eccentric training. To assess this, a study was conducted comparing eccentric (ECC) training with conventional (CON) training in cardiac rehabilitation program.

Methods: – Twenty-nine non-compliant cardiac patients (weekly moderate-intensity PA < 150 min) who benefited from a cardiac rehabilitation program (CRP) were randomized in intervention group (IG, n = 19) or in control group (CG, n = 10). The IG wore an accelerometer during 8 weeks to assess the active energy expenditure (EE, in Kcal) and the time spent in light, moderate or intense levels (min/week). Every 15 days, feedback and support were provided by telephone. The CG wore the accelerometer only during 8th week of the intervention.

Results: – In the IG, the weekly time spent at moderate-intensity PA increased from 95.6 ± 80.7 to 137.2 ± 87.5 min between the 1st and 8th week (P = 0.004, 53.6% of the sample achieving the targeted amount of moderate-intensity PA. During the 8th week, the EE averaged 543.7 ± 144.1 Kcal and 266.7 ± 107.4 Kcal in the IG and CG, respectively (P = 0.004).

Conclusions: – Telephone support based on accelerometric recordings appeared to be an effective strategy to improve the adherence to PA in non-compliant patients. This intervention could be implemented after CRP because it represents an inexpensive, modern and easy-to-use strategy.

References

Keywords: Adherence; Non-compliant; Accelerometers; Phone calls; Physical activity; Cardiac rehabilitation.
averaged 157.4 ± 115.4 and 165 ± 77.2 min per week for group 1 and 2, respectively. Fifty-three percent and 41% of patients remained active in both groups respectively.

Conclusion.– About half of the patients are non-adherent to PA after CRP and do not reach target levels recommended by physicians. The first 2 months following the discharge of CRP seem to be of outmost importance for lifestyle modifications maintenance, and further study monitoring more closely PA decrease could help to clarify the optimal follow-up options.

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The effects of cardiovascular rehabilitation after coronary stenting
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Keywords: Cardiac rehabilitation; Coronary stenting; Peak VO2; Cardiovascular risk factors; Quality of life

Purpose.– To determinate the effects of a cardiac rehabilitation program on risk factors, functional capacity, psychological well-being and quality of life in patients post coronary stenting (CS) realised after myocardial infraction (MI).

Methods.– It was a prospective study including 68 patients with MI who underwent CS.

Patients were randomized to control (CG: n = 38) or training group (TG: n = 30).

An evaluation with a maximal exercise testing (MET), a 6-minute walking distance (6-MWD), a measure of serum cholesterol levels, an impedancemetry, a SF36 scale and a HAD questionnaire was conducted at the beginning, after 8 weeks and after 2 years.

Results.– After 2 months of cardiac rehabilitation, the TG has improved his cardiorespiratory parameters especially peak VO2 (18%, P < 0.001), this gain was maintained after 2 years. An amelioration of cardiovascular risk factors was found only in the TG with an increase of the HDL cholesterol (P = 0.04). Evaluation after 2 years showed that 88% of smokers gave up smoking in the TG (P < 0.001) whereas it was only 24% in the CG (NS). Improved quality of life was observed only in the TG (P < 0.001). Both of the groups had a significant improvement in psychological status (more important for the TG). During the follow-up, the TG had significantly fewer hospitalisations for cardiovascular complaints than the CG (20% versus 44%, P < 0.001).

Discussion.– Coronary stenting should not delay cardiac rehabilitation that does not increase the risk of stent restenosis. The cardiac rehabilitation program after stenting is essential in the management of acute coronary syndromes (Class I Grade A).

It has a beneficial effect on functional capacity, cardiovascular risk factors and quality of life.

Further reading

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