Purpose

To objectively assess, in stable cardiac patients, the adherence to physical activity recommendations using an accelerometer at two or 12 months after the discharge of cardiac rehabilitation program (CRP).

Methods.

Eighty cardiac patients wore an accelerometer at 2 months (group 1, short-term adherence, n = 41) or one-year (group 2, long-term adherence, n = 39) after a CRP including therapeutic education about regular PA. PA was classified as “light” (1.8–2.9 METs), “moderate” (3.0–5.9 METs), or “intense” (>6 METs). Energy expenditure (EE, in Kcal and time (min) spent in these three different levels were measured during a one-week period with the MyWellness Key actimeter. Motivational readiness for change was also assessed at the end of CRP. Patients were considered as physically active when a minimum of 150 min of moderate PA during the one-week period was achieved.

Results.

Both groups were comparable, except for exercise capacity at the end of the CRP which was slightly higher in group 1 (167.5 vs 140.7 Kcal and 609.5 vs 433.5 Kcal in group 1 and 2, respectively. The total weekly active EE averaged P 0.01). The end effort stabilized VO2 was of 7.6 ± 2.37 (resting VO2: 4.27 ± 0.65) and of 22.1 ± 4.65 min/kg (resting VO2: 4.3 ± 0.8) for ECC effort vs CON.

Conclusion.

Because in particular of lower energy expenditure at level of comparable developed strength, the perceived exertion can not be used to adapt an ECC exercise, unlike a CON effort. Other means of ECC training personalization must be looked for.

References


Keywords: Adherence; Assessment; Physical activity; Cardiac rehabilitation

* Corresponding author.
E-mail address: t.guiraud@clinique-saint-orens.fr

http://dx.doi.org/10.1016/j.rehab.2012.07.777