

Long-term effect of Cardiac Rehabilitation (CR) program in older patients; does gender play a role? Data from CRAGE-Extra study

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Background

The positive effect of CR is demonstrated in younger and older patients. However, it is quite debated whether the benefits on exercise capacity is maintained over a long follow-up, in particular in older females.

Aim

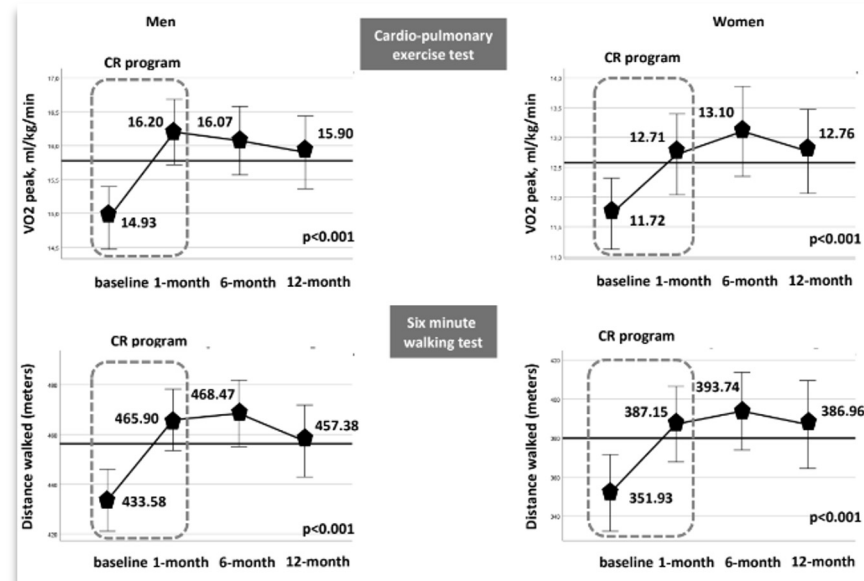
Determine if the improvement obtained after CR remained significant at 1-year follow-up in older population, testing the influence of gender on this outcome.

Methods

All patients aged 75+ yo consecutively referred to CR outpatient Unit at Careggi University Hospital were screened for eligibility. All patients attended a CR program, based on 5-day-per-week aerobic training sessions for 4 weeks and they were evaluated at the end of CR, at 6 and 12 months of FU.

Population

- 361 patients with a complete 1 year FU
- Mean age 80.6 ± 4.4 yo
- 27.6% females
- 87.5% history of an acute coronary event



Results

The increase in exercise capacity at the end of CR and at 1-year FU was statistically significant:

VO2 peak

+ $\Delta 14.9\%$ males, + $\Delta 8.5\%$ females ($p < 0.001$)

Distance walked at 6-minute test

+ $\Delta 7.3\%$ males, + $\Delta 10.2\%$ females ($p < 0.001$)

The trajectory of exercise improvement at 6 and 12 months of FU was similar in men and women without significant decrease from end of CR to 1-year:

VO2 peak

CR discharge vs 1 year FU = 15.2 vs 15 ml/min/kg (p : NS)

Distance walked at 6-minute test

CR discharge vs 1 year FU = 445.5 vs 440.6 m (p : NS)

Conclusions

The enhancement in exercise tolerance obtained with CR program is still maintained at 1 year follow-up without significant influence of gender in very old population.