

11515**Shorter cardiac rehabilitation programs: taking time is taking effectiveness?**

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Introduction: Due to the covid-19 outbreak, cardiac rehabilitation programs (CRP) underwent most needed adaptations to stay operative. To face all the requests and guarantee sanitary measures, we reduced the duration of the program from about 12 weeks to about 8 weeks, so we could have smaller groups but still respond to all patients who had been referred. However, it is still unclear whether less hours of contact and exercise sessions can achieve the same results as traditional CRP.

Objective: To analyse the effectiveness of shorter duration CRP on risk factor control and exercise tolerance after concluding the program.

Methods: Observational single center study including two groups of patients who underwent CRP: one group who had been in 12 weeks-CRP before the pandemic sprout and another group enrolled in an 8-week program after April 2021. Albeit differences in their duration, both CRP had the same structure: observation by cardiologist, physiatrist, specialist nurse, exercise (aerobic and strength exercises) and educational sessions, as well as nutrition and psychologist consultation.

Results: A total of 114 pts were analysed (mean age $62,4 \pm 11,6$ years, 85.1% men, 86% with ischemic heart disease). Main comorbidities were hypertension (68,4%), dyslipidaemia (70%) and diabetes (30,7%). 78 pts completed a longer programme with 12 weeks duration while 36 underwent a shorter CRP with 8 weeks. There were no statistically significant differences between both groups regarding population demographics, aetiology, LVEF and co-morbidities.

After CRP, there was significant improvement in risk factor control (mainly lipidic profile and weight) and echocardiographic parameters in both groups. We noted an important reduction in LDL levels (85 ± 42.6 mg/dL before CRP and 67.68 ± 28.45 mg/dL after), approaching the guideline recommended levels (<55mg/dL): 29.8% before vs 42.6% after ($p=0.079$), with no difference between the two groups ($p=0,65$). Significant improvement of LVEF was also observed (53% to 57%, $p < 0.001$) without difference between the two groups ($p=0.112$).

Exercise tolerance improved similarly in both groups, assessed by the time of exercise stress test: we registered a global increase of 65 ± 1.38 s after CRP, with no difference between the two groups ($p = 0.157$).

Conclusion: Shorter duration CRP showed similar results concerning risk factor control, echocardiographic LVEF and exercise tolerance improvement, suggesting that they can be an effective alternative when needed.