Ambulatory and home-based exercise training program in female patients with high cardiovascular risk

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Aim: The aim of the present study was to determine the effects of regular physical training on hemorheological and angiological parameters in high cardiovascular (CV) risk female patients.

Methods: 30 female patients (mean age: 67.6±5.6 yrs) with high CV risk were involved in ambulatory and home-based rehabilitation exercise training program for 3 months. The inclusion criteria were EF ≥ 55 % and exercise tolerance > 5 MET. All subjects underwent a 12-week training program including 1 hour training held in our out-patient clinic 3 times a week and a home-based walking program, where patients were encouraged to walk 10 000 steps a day. At the beginning and after the training period exercise capacity, hemorheological, laboratory and angiological parameters were measured.

Results: After 12 weeks fibrinogen level significantly decreased. Red blood cell deformability presented a significant increase (p<0.05). Metabolic laboratory parameters significantly decreased (p<0,05). The treadmill test proved significantly better exercise capacity (p<0.05). In angiological parameters no significant differences were observed.

Conclusion: The ambulatory and home-based exercise training program resulted in a significantly better risk profile and exercise tolerance in our female patients. All these beneficial changes may contribute to the reduction of CV mortality in patients participating an ambulatory rehabilitation program.

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