

## THE ROLE OF STRENGTH TRAINING IN CARDIOVASCULAR REHABILITATION

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### Abstract

**Introduction.** At the beginning of the cardiac rehabilitation era the benefits of strength training were minimized due to an unsustained traditional perception according to which this type of training was leading to an excessive increase in heart rate and blood pressure.

**Materials and Methods.** We analyzed the evolution of the exercise recommendations for resistance training in cardiac rehabilitation in the last 20 years. More than 10 scientific papers on this topic have been analyzed. In 2000 Pollock et al. published the first recommendations for resistance exercise in cardiac rehabilitation. They started with very cautious recommendations of low- to moderate-intensity dynamic resistance exercise focused mostly on young patients with ischemic heart disease (IHD) and with a good functional capacity.

This article initiated the discussions about this topic in cardiac rehabilitation and since then recommendations of resistance exercise have been part of every guideline and position paper on exercise-based cardiac rehabilitation. The growing experience and scientific evidence for the efficacy and safety of resistance exercise in different groups of cardiac patients, gained within the last two decades, have enriched this field. These processes made possible the appearance of recommendations of dynamic resistance exercise as a part of the training regime for a broad range of cardiac patients, including those with chronic heart failure. The appropriate training method and correct performance are highly dependent on each patient's clinical status, cardiac stress tolerance and possible comorbidities.

**Conclusion.** The growing evidence together with the increased practical therapeutic experience in this field have resulted in continual updates and adaptations of the recommendations for resistance training in cardiac rehabilitation.