

PROOF OF CONCEPT FOR EFFECT OF RESPIRATORY MUSCLE THERAPY ON HEART FAILURE



Patients with heart failure have a number of health issues with which they must live. Many of them can make treatment more difficult and even significantly impact their quality of life. Reduced respiratory muscle strength and endurance is one of the most common symptoms found with heart failure, and it probably leads to the commonly experienced exertional dyspnea and reduced exercise capacity. Both of the latter issues can markedly lower patients' quality of life.

One of the current areas being explored when it comes to treating patients with heart failure is selective respiratory muscle training, and various studies about it have been conducted. Selective respiratory muscle training (RMT)

was tested for improving dyspnea and exercise performance in patients with chronic congestive heart failure (CHF), for example, in the study we're going to discuss below.

Key findings

- Respiratory muscle weakness in people with chronic congestive heart failure (CHF) contributes to exertional dyspnea and reduced exercise capacity.
- 12 weeks of RMT improve respiratory and ventilatory function, oxygen uptake, exercise performance and dyspnea in people with CHF.

Patient impact

RMT effectively improves respiratory muscle strength and endurance, exercise capacity and dyspnea in people with CHF.

Study Methods

The following were assessed throughout the course of the study:

- Maximum sustainable ventilatory capacity
- Maximum voluntary ventilation
- Maximal inspiratory and expiratory pressures
- Peak oxygen volume
- Exercise performance
- Perception of dyspnea (POD)

The above were assessed both before and after three months of RMT, and the results compared to a control group.

Study Results

All parameters significantly improved in patients who completed selective RMT.

In conclusion, selective RMT significantly improves respiratory muscle strength and endurance, exercise capacity and dyspnea in patients with CHF. This study provides proof of the concept that respiratory muscle training is effective in this patient group.

Mancini DM, et al. Benefit of Selective Respiratory Muscle Training on Exercise Capacity in Patients With Chronic Congestive Heart Failure. Circulation.1995; 91: 320-329.