

# EFFECT OF RMT ON ADL IN PEOPLE WITH STROKE AND HEART FAILURE



Respiratory muscle weakness can lead to dyspnea, exercise intolerance, fatigue, and poor activities of daily living (ADL) in people with congestive heart failure (CHF). These symptoms can be exacerbated after stroke, as shown by reduced maximal inspiratory pressure (MIP) and maximal expiratory pressure (MEP) in community-dwelling stroke survivors. To determine possible treatment options for these issues, studies regarding RMT and CHF have been conducted.

Respiratory muscle training (RMT) was tested for its effect on performance of ADL in people with stroke combined with CHF.

## Key Findings

- Respiratory muscle weakness is prevalent in people with congestive heart failure (CHF).

- Respiratory muscle weakness contributes to exercise intolerance, dyspnea, and poor performance of activities of daily living (ADL).
- Stroke can exacerbate symptoms of CHF.
- 10 weeks of respiratory muscle training (RMT) improve respiratory muscle strength and performance of ADL in people with CHF and stroke.
- RMT effectively improves performance of ADL in people with stroke and CHF.

## Study Methods

MEP, MIP, spirometry, oxyhemoglobin saturation, dyspnea, fatigue, and ADL were assessed before and after 10 weeks of RMT in patients with stroke and CHF, and compared to a control group receiving stroke rehabilitation.

## Study Results

MIP and ADL were significantly improved in the group undergoing RMT. In conclusion, RMT effectively improves respiratory muscle strength and performance of ADL in patients with stroke and CHF.

## References

**Po-CHeng C.** Inspiratory muscle training in stroke patients with congestive heart failure: A CONSORT-compliant prospective randomized single-blind controlled trial. *Medicine*. 2016 Sep;95(37):e4856.