

Clinical Trial Overview

High-Frequency Chest Compression: Chronic Obstructive Pulmonary Disease (COPD)

In a 90-day trial of high frequency chest compression (HFCC) therapy, COPD patients completing the program and choosing to continue HFCC therapy showed statistically and/or clinically significant improvements in all treatment and quality-of-life outcomes including dyspnea, six-minute walk distance, quality of life treatment satisfaction and treatment adherence.

Title	Rumbak MJ, Marchione VL, Kennedy TC, Rolfe. Ninety-day assessment of the effect of high-frequency chest wall oscillation (HFCWO) on the exercise tolerance and quality of life of patients with chronic obstructive pulmonary disease. <i>MW. Chest</i> 2001; 120: 250S
Design	Prospective self-controlled
Method	<p>Thirty-eight eligible patients with COPD received HFCC 2 x daily for 15 minute sessions for 90 days. Inclusion criteria were...</p> <ul style="list-style-type: none"> • Age > 40 years • FEV₁ < 70% • Dyspnea and/or decreased functional ability <p>Baseline data included...</p> <ul style="list-style-type: none"> • Pulmonary function tests (PFT) • Six minute walk distance • Dyspnea scores (Borg Dyspnea and Transitional Dyspnea indices) • Quality of life scores (SF-36) • Symptom assessment survey <p>Prospective outcomes were compared to baseline parameters</p>
Results	<ul style="list-style-type: none"> • 27 of 38 subjects completed the study • 15 subjects completing the study chose to continue HFCC therapy • HFCC-continuing subjects showed statistically significant improvements ($p < 0.05$) over baseline for... <ul style="list-style-type: none"> ○ Six-minute walk distances (30+/-8% over baseline; 251 =/ft improvement) ○ Dyspnea scores 1.69+/-0.62) ○ General health assessment scores (5+/-3.5 vs -8.5+/-5) <p>Long-term HFCC users also showed excellent treatment adherence and reported high treatment satisfaction</p>

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