

Does Continuous High-Frequency Oscillation Therapy Improve Lung Aeration and Reduce Atelectasis in Patients With Impaired Consciousness Who Are Mechanically Ventilated?

STUDY DESIGN

- Multicenter, single-anonymized, randomized controlled trial of 80 patients who were intubated in ICUs in China
- Usual care vs 3 to 4 continuous high-frequency oscillation (CHFO) sessions daily (10 to 15 minutes)
- Primary outcome of decrease in nonaerated lung tissue at day 5, measured by CT scan

RESULTS



- Change in nonaerated lung tissue in CHFO group was **-51.3%** (95% CI, -62.7 to -40.0) vs **-37.6%** (95% CI, -49.3 to -26.0) in usual care group
- At day 28, CHFO group had more **ventilator-free days** (median 20.0 vs 14.0) and a **shorter ICU length of stay** (median 9.0 vs 14.0 days)

This study suggests that 5 days of CHFO treatment significantly reduced nonaerated lung tissue and was associated with a higher number of ventilator-free days and a shorter ICU stay in patients with impaired consciousness who were mechanically ventilated.