### OVERVIEW
High Frequency Chest Wall Oscillation (HFCWO) provides an improvement both in pulmonary function and quality of life in patients with chronic hyper-secretive bronchiectasis. Since those patients need daily airway clearance, HFCWO should be included among the principal options in chest physiotherapy.

### NICOLINI, ET AL. STUDY
The aim of the study was to find the more efficacious treatment in patients with bronchiectasis.

The intent of the study was to measure:
- Breathlessness & quality of life (QOL)
- Respiratory lung function
- Sputum production
- Sputum cellularity

It incorporated traditional techniques of chest physiotherapy (CPT) vs. HFCWO in patients with bronchiectasis.

Fifteen-day randomized control trial (RCT) used computer randomization to divide patients into three groups:
- Medical therapy only, as prescribed
- CPT/PEP – 45 mins/session, twice daily
- HFCWO – 30 mins/session, twice daily

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<th>Treatment Type</th>
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<td>Medical Therapy Only (Control)</td>
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<td>Traditional PEP/CPT</td>
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<td>Positive Expiratory Pressure (PEP)</td>
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<td>Devices &amp; ELTGOL</td>
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<td>HFCWO</td>
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<td>The Vest® Airway Clearance System by</td>
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<td>Hillrom™</td>
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37 enrolled
7 excluded
PATIENTS SHOWED SIGNIFICANT IMPROVEMENT IN DYSPNEA AND QOL WITH HFCWO

HFCWO showed a significant improvement in BCSS ($p \leq 0.001$) and CAT ($p \leq 0.001$).

HFCWO showed a significant reduction of blood inflammatory parameter C-Reactive Protein, compared to the PEP/CPT group ($p \leq 0.019$).

HFCWO showed a significant reduction of neutrophils percentage in sputum ($p \leq 0.002$).

HFCWO also produced a significant difference in sputum volume at the end of treatment from $52.0 \pm 16.9$ ml to $72.5 \pm 24.0$ ml ($p \geq 0.011$).

For more information, please contact your Hillrom sales representative at 1-800-426-4224.

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References