

# Clinical Trial Overview

## High-Frequency Chest Compression: Acute Care/Post-Surgical

An evaluation of the utility of high-frequency chest wall compression (HFCC) in the post-operative management of thoracic surgical patients at risk for secretion retention showed safety, tolerance and hemodynamic stability. Cost savings were anticipated.

<b>Title</b>	Allan, JS, Garrity JM, Donahue, DM. The Utility of High-Frequency Chest Wall Oscillation Therapy in the Post-Operative Management of Thoracic Surgical Patients. <i>Abstract: Control/Tracking Number: 03-A-732-ACCP.</i>
<b>Design</b>	Randomized Prospective
<b>Method</b>	<ul style="list-style-type: none"> <li>• Twenty-five elective cardiothoracic surgical patients (ages 47-83) judged to be at risk for secretion retention-related pulmonary complications were randomly selected to receive HFCC as part of their routine post-operative care</li> <li>• HFCC was applied three times daily             <ul style="list-style-type: none"> <li>○ frequency: 12Hz</li> <li>○ therapy duration: 10 minutes</li> </ul> </li> </ul> <p>Data collection included...</p> <ul style="list-style-type: none"> <li>• Routine hemodynamic and pulse oximetric values before, during, and after treatment</li> <li>• Qualitative tolerance and preference information (compared to chest physiotherapy [CPT])</li> </ul>
<b>Results</b>	<ul style="list-style-type: none"> <li>• No major adverse events were observed during or subsequent to HFCC</li> <li>• Hemodynamic and pulse oximetric values remained stable throughout the treatment period</li> <li>• Eighty-four percent of patients reported little or no discomfort during therapy</li> <li>• HFCC was preferred to conventional chest physiotherapy by a 2:1 margin</li> <li>• HFCC appears safe for use in post-cardiothoracic surgical patients</li> <li>• HFCC provides reliable, consistent quality airway clearance</li> <li>• HFCC may offer significant cost-savings in the ICU setting</li> </ul>

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