

Chest Clearance Technique on Dyspnoea Management in Community-Acquired Pneumonia: A Study Protocol

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ABSTRACT

Introduction: Dyspnoea is a common feature of Community Acquired Pneumonia (CAP) which affects the functional activity and Quality of Life (QOL) of patients. Airway Clearance Techniques (ACTs), in addition to antimicrobial and supportive therapies, are essential in the management of dyspnoea. ACTs reduce respiratory exertion by facilitating of movement of mucus from the lower respiratory tract.

Aim: To compare the effect of the Active Cycle of Breathing Technique (ACBT) and Postural Drainage (PD) on dyspnoea in CAP by using a modified Borg scale, MRC scale, oxygen saturation and chest expansion.

Materials and Methods: This experimental, randomised, parallel-group trial include 32 participants (CAP patients aged between 40-70 years) allocated into two groups, Group A (ACBT) and Group B (PD with percussion and vibration), as airway clearance technique. Both groups will receive 4 weeks of baseline treatment, diaphragmatic and segmental breathing exercises (10 repetitions, 3 sets, with one-minute rest between sets, tailored to individual chest radiograph results), and Range of Motion (ROM) exercise for both the upper extremity and lower extremity (10 repetitions, 3 sets) with ambulation.

Keywords: Active cycle of breathing technique, Community-acquired infections, Postural drainage

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