Short term effect of chest physiotherapy in acute exacerbation of Chronic Obstructive Pulmonary Disease


Setting the scene:
The objectives of the study to find out the short-term effect of chest physiotherapy in acute exacerbation of chronic obstructive pulmonary disease.

What did they do?
60 patients suffering from Chronic obstructive Pulmonary disease were randomly allocated into two groups, experimental group (n=30) treated with active chest physiotherapy techniques (breathing control exercises: consisted breathe in through the nose and breathe out through pursed lips The step repeated for 8-10 times, thoracic expansion exercise: consisted of full inspiration with holding air inside lungs for 1-3 seconds and then full end with pursed lips. It was performed 3-4 times on patients, forced expiration technique included 1-2 huffs followed by force full cough for 1 or 2 times along with medical treatment and control group (n=30) treated with only medical treatment. Patients were assessed using The Peak Expiratory Flow Rates (PEFR) measured with help of peak flow meter, the oxygen saturation (SaO2) measured by the pulse oximeter and breathlessness level evaluated by 100 mm Visual Analogue Scale (VAS).

Takeaway message:
Chest physiotherapy is more effective in improving breathlessness level, SaO2 and peak expiratory flow rates in acute exacerbation of COPD along with standard medical treatment than medical treatment alone. The estimated effects of chest physiotherapy in COPD patients are about three times more pronounced with medical treatment compared to medical treatment alone.