**Original article:
Effects of Diaphragmatic weight training versus Incentive spirometry in patients weaned from Mechanical Ventilation.-A pilot study
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**Abstract:**

**Introduction:** The patients requiring support of mechanical ventilation to improve their pulmonary status often compromise with respiratory muscle strength; primarily diaphragm. Effects of Incentive spirometry (IS) in ventilatory muscle training for improvement of pulmonary functions have already been proved. To achieve same improvement; another technique called ‘Diaphragmatic weight training’ can be used, which is cost effective and easy to perform. But there is less evidence available for this technique. So the present pilot study aims to compare effects of diaphragmatic weight training versus Incentive spirometry in patients weaned from mechanical ventilation.

**Methodology:** A pilot study conducted on 10 patients who were weaned from mechanical ventilation. Group A patients were trained for Diaphragmatic weight training and Group B were given Incentive spirometry. Outcome measures were pulmonary function tests (FVC, SVC and MVV) and ATS Dyspnoea scale.

**Result:** The study reported no statistically significant difference in values of FVC, SVC and ATS dyspnoea scale between group A and group B. But statistical difference in values of maximal voluntary ventilation (MVV) in group A and B is significant.

**Conclusion:** The study concludes that the diaphragmatic weight training and Incentive spirometry were equally effective in improving FVC, SVC and dyspnoea in patients after weaning from mechanical ventilation. But Incentive spirometry was more effective to advance MVV in these patients.

**Key words**: Diaphragmatic weight training, Incentive spirometry, ACBT