Author Year Country Research Design Score Sample Size	Methods	Outcome
Pillastrini et al. 2006 Italy RCT PEDro = 3 Level 2 N = N/S	Population: Control Group: Mean Age: 52.2 yr; Gender: male=75%, female=25%; Treatment Group: Mean Age: 31.5 yr; Gender: male=80%, female=20%; Level of injury: cervical; Severity of injury: complete =100%; AIS A. Intervention: The patients were randomized to receive either mechanical insufflation/exsufflation in addition to manual kinesitherapy, or kinesitherapy only. Outcome Measures: Forced vital capacity (FVC), FEV ₁ , peak expiratory flow (PEF), (FEV ₁ /FVC), arterious pressure of O ₂ (Pa O ₂), arterious pressure of CO ₂ (Pa CO ₂), (pH), saturation of oxygen (SaO ₂). Chronicity: Time since injury not specified.	 Among patients who received mechanical insufflation/exsufflation, FVC and FEV₁was significantly higher at the end of treatment compared to the beginning (p=0.0001). Among patients who received mechanical insufflation/exsufflation, PEF was significantly higher at the end of treatment compared to the beginning (p=0.0093). Among patients in the control group, there was no significant improvement in FVC, FEV₁, or PEF (p>0.05) between the end of treatment and the beginning. There were no significant differences in FEV₁/FVC, Pa O₂, Pa CO₂, pH, and SaO₂ in either of the groups (p>0.05 in all cases).
Garstang et al. 2000 USA Pre-post Level 4 N = 18	Population: 18 patients with SCI (C1-T3), 88% were C5 or higher. Methods: Surveyed preference for: suctioning or maximal in/exsufflation (MI-E). Outcome Measures: Not Specified. Chronicity: Time since injury was up to 3 years post-injury; patients originated from several different acute care hospitals.	 MI-E was less irritating, less painful, less tiring, less uncomfortable. All were clinically significant changes (except less tiring). 16 of 18 patients preferred MI-E and one preferred suctioning; 1 patient had no preference. When surveyed, average time from MI-E was 146 days and from suctioning was 253 days.