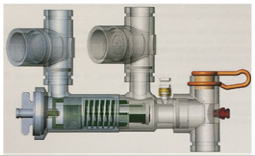

High frequency percussive ventilation and conventional ventilation after smoke inhalation: a randomised study.

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Inhalation injury and bacterial pneumonia represent some of the most important causes of mortality in burn patients. Thirty-five severely burned patients were randomised on admission for conventional ventilation (CV; control group) versus high frequency percussive ventilation (HFPV; study group). HFPV is a ventilatory mode, introduced 10 years ago which combines the advantages of CV with some of those of high frequency ventilation.Arterial blood gases, ventilatory and hemodynamic variables were recorded for 5 days at 2h intervals. Incident complications were classically managed. A statistical analysis (Student's t-test and Wilcoxon signed rank test) demonstrated a significant higher PaO_2/FiO_2 from days 0 to 3 in the HFPV group. No significant differences were observed for the other parameters. Our findings suggest that HFPV can improve blood oxygenation during the acute phase following inhalation injury allowing reduction of FiO_2. No significant differences were observed between groups for mortality nor incidence of infectious complications in this study.

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