

Ventilation After Breathing Tube Removal May Alter Outcomes

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(HealthDay News) - People with chronic respiratory disorders who receive early non-invasive ventilation after a breathing tube has been removed are less likely to suffer respiratory failure or die, a Spanish study has found.

The study included 106 people on mechanical ventilation. All of them had high levels of carbon dioxide in their blood, a condition known as hypercapnia. After their internal breathing tubes were removed, in a procedure called extubation, 54 people received non-invasive ventilation for 24 hours and 52 were given conventional oxygen treatment, the according to the study.

Respiratory failure after extubation occurred in 15 per cent of those who received non-invasive ventilation and in 48 per cent of people given conventional oxygen therapy. Non-invasive ventilation was associated with an 83 per cent decreased risk for respiratory failure after extubation, the researchers found.

They also found that the death rate after 90 days was much lower among people in the non-invasive ventilation group (11 per cent) than among those who received conventional oxygen therapy (31 per cent).

"Early non-invasive ventilation after extubation diminished risk of respiratory failure and lowered 90-day mortality in patients with hypercapnia during a spontaneous breathing trial," concluded Dr. Miquel Ferrer, of the Hospital Clinic of Barcelona, and his research colleagues. "Routine implementation of this strategy for management of mechanically ventilated patients with chronic respiratory disorders is advisable."

The study appears online this week and in an upcoming print issue of The Lancet.

More information

The U.S. National Women's Health Information Center has more about <http://womenshealth.gov/faq/lung-disease.cfm> lung disease.

SOURCES: Kathryn Schmitz, Ph.D., M.P.H., associate professor, epidemiology, University of Pennsylvania, Philadelphia; Wendy Demark-Wahnefried, Ph.D., R.D., professor, department of behavioral science, University of Texas MD Anderson Cancer Center, Houston; Aug. 13, 2009, New England Journal of Medicine