Noninvasive positive pressure ventilation for chronic respiratory failure patients with stable chronic obstructive pulmonary disease (COPD): an evidence-based analysis

COPD Working Group

Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
The objective of this health technology assessment was to determine the effectiveness and cost-effectiveness of noninvasive ventilation for stable chronic obstructive pulmonary disease (COPD).

Authors' conclusions
The following conclusions refer to stable, severe COPD patients receiving usual care. Short-Term Studies - Based on low quality of evidence, there is a beneficial effect of NPPV compared with no ventilation on oxygen gas exchange, carbon dioxide gas exchange, and exercise tolerance measured using the 6 minute walking test. - Based on very low quality of evidence, there is no effect of NPPV therapy on lung function measured as forced expiratory volume in 1 second (Type II error not excluded). Long-Term Studies - Based on moderate quality of evidence, there is no effect of NPPV therapy for the outcomes of mortality, lung function measured as forced expiratory volume in 1 second, and exercise tolerance measured using the 6 minute walking test. - Based on low quality of evidence, there is no effect of NPPV therapy for the outcomes of oxygen gas exchange and carbon dioxide gas exchange (Type II error not excluded). Qualitative Assessment - Based on low quality of evidence, there is a beneficial effect of NPPV compared with no ventilation for dyspnea based on reduced Borg score or Medical Research Council dyspnea score. - Based on moderate quality of evidence, there is no effect of NPPV therapy for hospitalizations. - Health-related quality of life could not be evaluated.

Final publication URL

Additional data URL
http://www.hqontario.ca/en/mas/mas_ohtas_tech_copd_ventilation_chronic_20120313.html

Indexing Status
Subject indexing assigned by CRD

MeSH
Humans; Positive-Pressure Respiration; Pulmonary Disease, Chronic Obstructive; Respiratory Insufficiency

Language Published
English

Country of organisation
Canada

Province or state
Ontario
English summary
An English language summary is available.

Address for correspondence
Medical Advisory Secretariat, Ontario Ministry of Health and Long Term Care, 20 Dundas Street West, 10th Floor, Toronto, ON M5G 2N6 Canada Email: MASinfo.moh@ontario.ca

AccessionNumber
32012000632

Date abstract record published
21/09/2012