TITLE: Continuous Positive Airway Pressure for Acute Respiratory Failure in the Pre-Hospital Setting: Guidelines

DATE: 18 June 2014

RESEARCH QUESTION

What are the evidence-based guidelines regarding the use of continuous positive airway pressure (CPAP) for the management of acute respiratory failure in the rural pre-hospital setting when intubation cannot be performed?

KEY MESSAGE

One systematic review was identified regarding the use of CPAP for the management of acute respiratory failure in the pre-hospital setting; no evidence-based guidelines for this setting were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 6), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2009 and June 6, 2014. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by evidence-based guidelines.

One systematic review was identified regarding the use of CPAP for the management of acute respiratory failure in the pre-hospital setting. No health technology assessments or evidence-based guidelines for this setting were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One systematic review and meta-analysis\(^\text{1}\) included five studies on the use of CPAP in the pre-hospital setting, for patients with acute respiratory failure. The included studies demonstrated that the use of CPAP resulted in fewer intubations and lower mortality compared with no use of CPAP. However, the authors stated that conduction of large randomized controlled trials would be necessary to confirm these findings before CPAP is routinely used by ambulance services.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Randomized Controlled Trials


Non-Randomized Studies


Review Articles
