The clinical effectiveness and cost-effectiveness of heated humidified high-flow nasal cannula compared with usual care for preterm infants: systematic review and economic evaluation


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
Respiratory problems are one of the most common causes of morbidity in preterm infants and may be treated with several modalities for respiratory support such as nasal continuous positive airway pressure (NCPAP) or nasal intermittent positive-pressure ventilation. The heated humidified high-flow nasal cannula (HHHFNC) is gaining popularity in clinical practice. To address the clinical effectiveness of HHHFNC compared with usual care for preterm infants we systematically reviewed the evidence of HHHFNC with usual care following ventilation (the primary analysis) and with no prior ventilation (the secondary analysis). The primary outcome was treatment failure defined as the need for reintubation (primary analysis) or intubation (secondary analysis). We also aimed to assess the cost-effectiveness of HHHFNC compared with usual care if evidence permitted.

Authors' conclusions
There is a lack of convincing evidence suggesting that HHHFNC is superior or inferior to usual care, in particular NCPAP. There is also uncertainty regarding whether or not HHHFNC can be considered cost-effective. Further evidence comparing HHHFNC with usual care is required.

Project page URL
http://www.nets.nihr.ac.uk/projects/hta/1415103

Final publication URL
http://www.journalslibrary.nihr.ac.uk/hta/hta20300/#/abstract

Indexing Status
Subject indexing assigned by CRD

MeSH
Humans; Catheters; Cost-Benefit Analysis; Infant; Infant, Newborn; Infant, Premature; Respiratory Distress Syndrome, Newborn; Treatment Outcome

Language Published
English

Country of organisation
England

English summary
An English language summary is available.

Address for correspondence

Health Technology Assessment (HTA) database
Copyright © 2018 Queen’s Printer and Controller of HMSO
Accession Number
32016000648

Date abstract record published
26/04/2016