

INPLASY PROTOCOL

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Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:
None declared.

Frequency and assessment of swallowing disorders in adults on high-flow nasal cannula in critical and non-critical care settings. A scoping review protocol

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Review question / Objective: i) What are the characteristics of the population undergoing high-flow nasal cannula (HFNC) in which swallowing disorders have been assessed? ii) What has been the programming used in HFNC when assessing swallowing disorders? iii) What assessment tools or scales have been used to assess swallowing disorders in adults undergoing HFNC?

Background: HFNC has become a widely used respiratory support system, which has been shown to have positive effects in different populations. While facilitation of oral communication and feeding have been described as advantages, swallowing disorders have been postulated as potential complications.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 November 2022 and was last updated on 17 November 2022 (registration number INPLASY2022110078).

INTRODUCTION

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Background: HFNC has become a widely used respiratory support system, which has been shown to have positive effects in different populations. While facilitation of oral communication and feeding have been described as advantages, swallowing disorders have been postulated as potential complications.

Rationale: There are currently different primary studies, using different assessment methodologies, which report disparate results on the incidence of swallowing disorders, and the flows used in HFNC needed to trigger them, in adults with and without diseases. However, such evidence is scattered in the literature, not systematically searched, and not adequately summarized.

METHODS

Strategy of data synthesis: The databases to be searched include MEDLINE (Ovid), Embase (Ovid), CENTRAL (Cochrane Library), Cumulative Index of Nursing and Allied Literature Complete (CINAHL Complete) (EBSCOhost). In addition, unpublished studies and gray literature will be searched. The search strategy will include controlled and natural language terms for "HFNC" and "swallowing disorders". The search was not limited by publication date, publication status, or the language of the studies.

Eligibility criteria: This review will consider 1) studies involving adults (18 years and older) undergoing HFNC due to acute or chronic respiratory failure; 2) studies that assess swallowing disorders during the application of HFNC; 3) studies conducted in the hospital, in both critical and non-critical units; and 4) primary studies.

Source of evidence screening and selection: Titles and abstracts will be independently screened by two research team members, who will discard studies irrelevant to this review. Subsequently, the full texts of the potential studies to be included will be analyzed to determine which articles meet all the eligibility criteria. In the first instance, disagreements

will be resolved by consensus, and if they persist, a third reviewer will determine the inclusion of the studies.

Data management: Two reviewers will independently extract information from the included studies. An extraction form specifically designed to meet the objectives of this review will be used.

Presentation of the results: The results of the search and selection of studies will be reported through a PRISMA flow chart. The results will be reported in narrative form, and tables and figures will be used to synthesize the information.

Language restriction: The search will not be limited by the language of publication of the studies.

Country(ies) involved: Chile.

Keywords: Deglutition disorders; Dysphagia; High-flow nasal cannula.

Dissemination plans: The findings of this review will be presented at conferences and published in peer-reviewed journals.

Contributions of each author:

Author 1 - Ruvistay Gutierrez-Arias - Conception and design of the study; Developed the search strategies; Designed the data analysis; Drafted the manuscript.

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