Is There Supporting Evidence for Universal Nil Per Os Status Within the Emergency Department? A Scoping Review

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Objective

To summarize existing data on the impact of NPO status on Emergency Department (ED) patients and to evaluate the evidence supporting the traditional practice of routine nil per os (NPO) during the ED stay.

Introduction

Guidelines recommend specific fasting durations for patients undergoing procedural sedation and analgesia (PSA); however, evidence supporting routine NPO status in emergency department patients is limited.

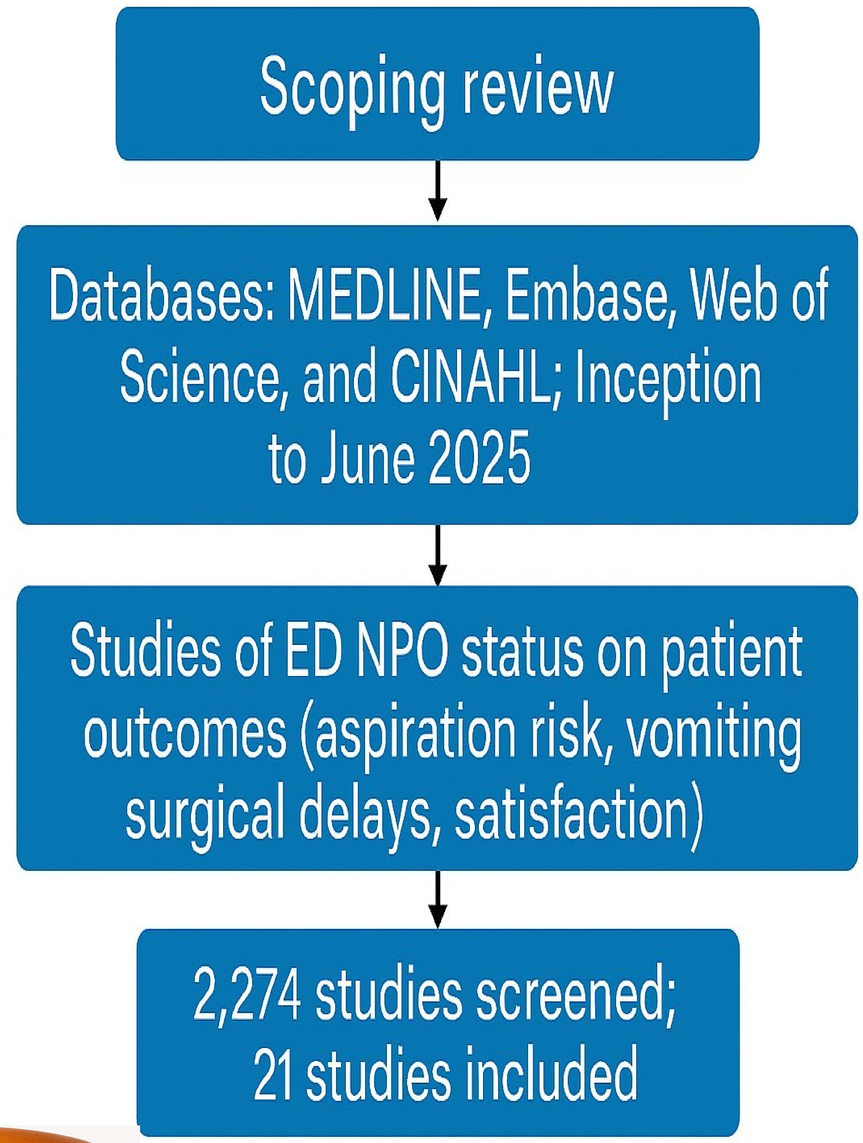
Prolonged fasting has been associated with adverse outcomes, delays in care, and increased patient dissatisfaction.

Despite this, strict NPO practices remain common in ED settings. This review evaluates the relationship between fasting status, NPO duration, and adverse events following PSA in the ED.

Methodology

A scoping review was conducted using Medline, Embase, Web of Science, and CINAHL databases, from inception to June 2025. We included original studies assessing the impact of ED NPO status on patient outcomes, specifically aspiration risk, vomiting, delays in emergent/urgent surgical procedures, and patient/provider satisfaction.

The protocol was registered with the Open Science Framework(https://doi.org/10.17605/OSF.IO/JS2RY) .



Results

2274 studies were screened, n=21 included. Most of the studies(n=13) evaluated the relationship between fasting and adverse outcomes after PSA in the ED and found no significant association between fasting and adverse events in adult and pediatric patients undergoing PSA in the ED.

Several studies analyzed the association of NPO duration with rate of adverse events following PSA, and n=6 found no statistically significant association between median fasting duration and adverse events.

Four studies (n=4) found that most patients undergoing PSA in the ED did not fast according to the established guidelines of The American Academy of Pediatrics/American Society of Anesthesiology (AAP/ASA)

Conclusion

Current PSA fasting guidelines are based on elective surgical populations and may not apply to ED patients. This review found no association between preprocedural fasting and adverse events during PSA.

Routine NPO status in the ED may be unnecessary and should be guided by clinical judgment rather than automatic protocol.