

Aspiration of nasogastric tubes in infants

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Abstract

Background: Varying protocols exist as to how often infants being fed via nasogastric tubes should have the tube aspirated.

Clinical Question: In infants being fed by nasogastric tube, does the frequency of aspiration of the gastric contents to assess tube position and feed tolerance effect clinical outcomes such as length of stay, time to full feeding, etc?

Methods: We included all trials in infants published in English after 1990. Studies in children over 12 months old and adult patients were excluded.

We searched The Cochrane Library, including The Cochrane Database of Systematic Reviews, DARE, CENTRAL and HTA in January 2005. We also searched Medline and CINAHL and several key guideline websites.

Studies were selected and appraised by one reviewer in consultation with colleagues, using inclusion, exclusion and appraisal criteria established a priori.

Results: No relevant studies were identified. Several authors of papers in the area note that further research is required to determine the most effective protocols for management of nasogastric tubes in infants.

Conclusions: In infants being fed by nasogastric tube, there is no evidence to assess whether the frequency of aspiration of the gastric contents effects clinical outcomes.

Implications for Practice: Protocols for the management of nasogastric feeding tubes in infants should make recommendations as to whether and when nasogastric tubes should be aspirated based on the consensus opinion of a multidisciplinary group which includes opportunity for consumer input. Evidence from studies in older children and adults may be useful in informing this decision.

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Background

Across Southern Health there are varying protocols on how often infants being fed via nasogastric tubes should have gastric contents aspirated. If management is to be standardised, then clinicians would like protocols to be in line with the best available evidence. This question is particularly of interest in infants weighing less than 1500 grams, and/or being fed 2 hourly.

Clinical Question

In infants being fed by nasogastric tube, does the frequency of aspiration of the gastric contents effect clinical outcomes such as length of stay, time to full feeding, etc?

Methods

Study Selection Criteria

Patient	Infants being fed by nasogastric tube
Intervention	Aspiration of gastric contents
Comparison	Any
Outcomes	Any
Study Type	Any
Publication Date	1990-2005
Language	English

Search Strategy

Evidence Source	Date of Search
The Cochrane Library *	18 th January 2005
Medline (PubMed)	21 st January 2005
CINAHL (Ovid)	21 st January 2005
www.guidelines.gov	18 th January 2005

*(including The Cochrane Database of Systematic Reviews, DARE, CENTRAL and HTA)

Search Terms in Medline

Patient	((exp Infant/) OR (newborn OR neonat* OR infant*)) AND ((exp Intubation, Gastrointestinal/ OR exp Intubation, Intratracheal/ OR exp Enteral Nutrition/) OR nasogastric OR naso-gastric OR tube feeding)
Intervention	aspirat*
Comparison	-
Outcomes	-

Note that the search term "exp Intubation, Intratracheal/" was included after articles were identified which had been misclassified under this heading in preliminary searches.

Data Collection & Analysis

Studies were selected and appraised by one reviewer in consultation with colleagues, using inclusion, exclusion and appraisal criteria established a priori.

Results

No relevant studies were identified

Conclusions

In infants being fed by nasogastric tube, there is no evidence to assess whether the frequency of aspiration of the gastric contents effects clinical outcomes.

Implications for Practice

Protocols for the management of nasogastric feeding tubes in infants should make recommendations as to whether and when gastric contents should be aspirated based on the consensus opinion of a multidisciplinary group which includes opportunity for consumer input. Evidence from studies in older children and adults may be useful in informing this decision.

References

No relevant studies were identified.

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