Parental reports on the experience of using tube feeds: blenderized vs. non-blenderized formulas

Nelimar Cruz-Centeno

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Submitting/Presenting Author (must be a trainee): Nelimar Cruz-Centeno
Primary Email Address: ncruzcenteno@cmh.edu

☐ Medical Student
☐ Resident/Psychology Intern (≤ 1 month of dedicated research time)
☐ Resident/Ph.D/post graduate (> 1 month of dedicated research time)
☒ Fellow

Primary Mentor (one name only): Richard J Hendrickson
Other authors/contributors involved in the project: James A. Fraser, Shai Stewart, Tolulope Oyetunji

IRB Number: 498

Describe role of Submitting/Presenting Trainee in this project (limit 150 words):

Lead research fellow in the project, data collection, data analysis, writing, and editing.

Background, Objectives/Goal, Methods/Design, Results, Conclusions limited to 500 words

Background:

Providers are hesitant to recommend blended tube feeds after gastrostomy tube placement primarily due to the perceived increased risk of tube occlusion.

Objectives/Goal:

We aim to assess the use of blended feeds within the first 6-8 weeks after gastrostomy tube placement, its associated complications, and satisfaction among caregivers.

Methods/Design:

Prospective nonrandomized single-center observational study of patients who underwent gastrostomy tube placement from January 2019-2021. A survey was administered to caregivers at the 6-8 week visit for initial tube exchange addressing the use of blended feeds, reasons for use, complications, and satisfaction. The differences between blended feed and formula feed groups were analyzed using the chi-square test for categorical variables. Significance was defined as a P < 0.05. STATA 15 (StataCorp 2017. Stata Statistical Software: Release 15. College Station, Tx: StataCorp LLC) software was used for statistical analyses.

Results:
A total of 142 patients were included in the study. The cohort was predominantly male (54.9%, n=78) with a median age at gastrostomy tube placement of 71.5 days (IQR 2.2,362). Eleven (7.7%) patients received blended feeds and 131 (98.2%) used formula. The overall satisfaction rate with the use of blended feeds was 100%. The most common reason to not use blended feeds was a lack of knowledge about this option (65%, n=85). The occurrence of gastrostomy tube clogging for the blended and formula feed groups was 18.2% (n=2) vs 8.6% (n=11) p=0.3. There was no statistically significant difference between groups in terms of gastrostomy tube diameter or length, medication administration via gastrostomy tube, clogging, emergency department visits, or clinic calls for tube clogging.

**Conclusions:**

The use of blended feeds after gastrostomy tube placement within our institution is low, most likely due to the lack of knowledge about this option. There is high satisfaction among caregivers who use blended feeds, with no difference in tube clogging, emergency department visits, or clinic calls for tube clogging compared to patients using formula feeds.