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Assessing Early Use and Complications of Gastrostomy Blended Feeds

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Assessing Early Use and Complications of Gastrostomy Blended Feeds

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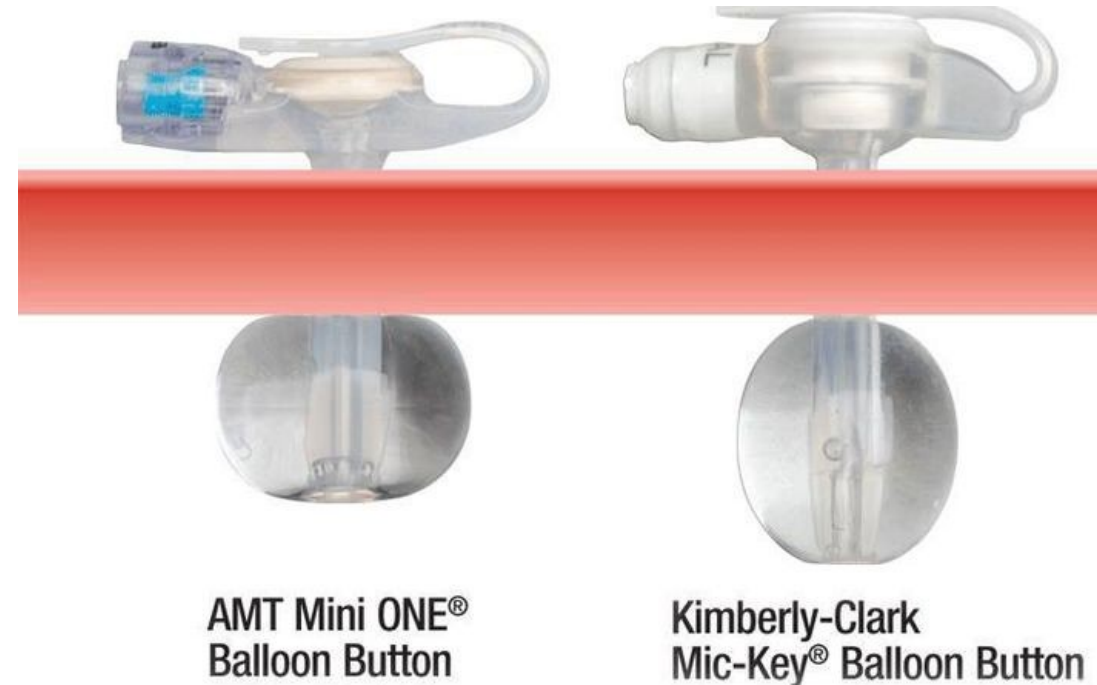
LOVE WILL.



No disclosures

Introduction

- Gastrostomy tube (G-tube) placement is a significant event for patients and caretakers
- Long-term multidisciplinary involvement and education is critical
 - Choice of tube feeds and their composition is important



- Pureed whole foods (blended feeds) were standard until the introduction of commercial formula feeds (1970)
- Concerns regarding blended tube feeds:
 - *Bacterial contamination*
 - *Poor growth and development*
 - *Inadequate nutrition*
 - *Tube obstruction*
 - *Lack of long-term data*

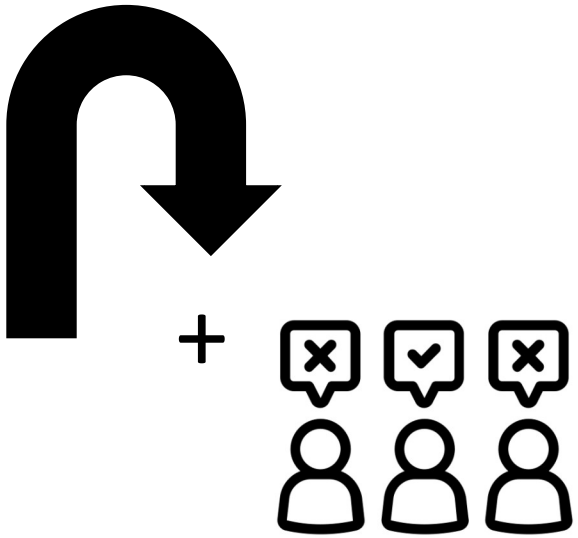
Why the hesitation?

- Difficulty proposing uniform recommendations for or against the use of blended feeds
 - Emphasis on concerns with blended feeds in the literature
 - Lack of provider education

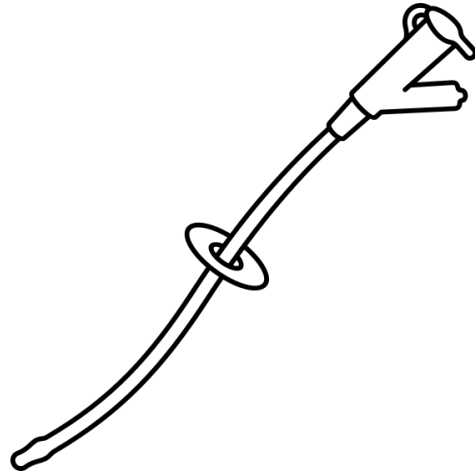
- A robust caretaker network has emerged independent of healthcare providers
 - Benefits cited by caretakers include:
 - *Better tolerance of feeds*
 - *Reduced GI symptoms such as gagging, vomiting*
 - *Normalization of the tube feeding process*

Assess the early use of blended tube feeds, potential complications, and satisfaction among caretakers of gastrostomy tube dependent patients

Methods



- Single-institution
- Survey at 6–8-week follow-up
+
Retrospective review
- January 2019 – January 2021



- All children <18 years old
- G-tube placement
- Initial G-tube exchange



- Type, prevalence, and satisfaction with BF use
 - Reasons for use or non-use of BF
- G-tube obstruction requiring evaluation in ED, clinic, or reoperation within 8 weeks

Results

Type of tube feeds (n = 146)	
Formula only	135 (92.5%)
Home Blended only	3 (2.1%)
Commercial Blended only	2 (1.4%)
Formula + Home Blended	3 (2.1%)
Formula + Commercial Blended	2 (1.4%)
Home Blended + Commercial Blended	1 (0.7%)
# of patients using Blended Feeds	11/146 (7.5%)

I DO NOT use blended feeds for the following reasons:

Have not heard of blended feeds	71%
I do not know how to make them	25%
Concerned about safety	9%
Too much prep time	6%
More expensive	4%

Caretakers may select more than one response

Reasons for using blended feeds:

More natural	64%
Better tolerance	55%
To eat what family eats	36%
Allergies to formula	36%
Lower cost	36%
Do not like formula ingredients	28%

		Blended Feeds (n = 11)	Formula Feeds (n = 135)
Tube type	Mic-Key	10 (91%)	98 (73%)
	Mini	1 (9%)	37 (27%)
Tube size	12Fr	10 (91%)	121 (90%)
	14Fr	1 (9%)	11 (8%)
	16Fr	0	3 (2%)
# of patients experiencing clog		2 (18%)*	11 (8.4%)*
ER visits for clogged G tube prior to first change		0	3 (2.2%)
Clinic visits for clogged G tube prior to first change		0	4 (2.9%)
Clog requiring reoperation prior to first scheduled change		0	0

****All obstructions in 12Fr G-tubes***

I am glad I used blended feeds earlier than recommended:

Yes	9 (82%)
No	2 (18%)

Satisfaction with blended feeds:

Very satisfied	10 (91%)
Somewhat satisfied	1 (9%)
Not satisfied	0

Caretakers who experienced early G-tube obstruction expressed concern with early blended feed use (< 6 weeks)

Discussion

- Infrequent blended tube feed use among our patient cohort
 - *Lack of knowledge regarding the option and preparation of blended tube feeds was common*
- In our cohort using blended tube feeds:
 - *Risk for obstruction requiring reoperation or operative replacement was not increased*
 - *Perceived to be more natural*
 - *Better tolerated than formula feeds*
 - *High satisfaction among caretakers*

Reemergence of Blended Tube Feeding and Parent's Reported Experiences in Their Tube Fed Children

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- 433 caretakers of tube fed children from an online tube feeding support group
 - 49.3% who used blended tube feeds referred to healthcare providers for oversight of their regimen

- Current literature supports benefits of blended feeds:
 - *Better tolerance*
 - *Nutritionally adequate*
 - *Appropriate growth*
 - *No increased risk for hospitalization*
 - *Higher family and caretaker satisfaction*
- Complications will occur, regardless of tube feed formula

Conclusion

- Use of blended feeds after G-tube placement within our institution is low due to a lack of education regarding their use, preparation, and safety
- Providers should discuss blended feeds as an option with caregivers and patients



Thank you

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