



neonatal perspectives

Neonatal Enteral Feeding Tubes: Part 2

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Feeding tubes for the neonatal patient may seem to be a rather simple aspect of the enteral feeding tube continuum, but the reality is they incite many questions and concerns. Neonatal intensive care clinicians understandably want to be fully aware of not only common usage details, but of safety and improved care potential.

This part 2 of 2 on neonatal enteral feeding tubes shares additional questions on this subject.

Why are feeding tube end holes an important consideration?

Most feeding tubes are designed with side holes near the tip as a fluid outlet to the neonatal stomach. Some also include an end hole, at the very tip of the feeding tube. This end hole is an added benefit for two reasons: 1) It provides another fluid outlet in the event one of the side holes experiences an occlusion, and 2) it prevents residual fluid from collecting and remaining pooled at the bottom of the tube for the duration of the feeding tube insertion. Fluid remaining for a duration of time at the end of the feeding tube while in the neonatal stomach could become a potential breeding ground for bacteria. For more information on this, see the study *Neonatal enteral feeding tubes as loci for colonization by members of the Enterobacteriaceae* (link below).

How are side and end holes manufactured in the tube?

This is a question you will want to ask your enteral feeding device representative, as methods vary between manufacturers. However, one action you *can* take is to compare for yourself the surface of these feeding tube side and end holes. Are they soft, or do they feel sharp? Consider the fragility of the neonatal sinuses or oral cavity and throat (depending on OG or NG), esophagus and stomach lining. If the feeding tube side and end holes are sharp or rough, they could cause tissue damage, especially if your unit replaces feeding tubes frequently. A smooth, soft surface edge to the side and end holes would be ideal.

Should medication ports be on a feeding tube?

Many neonatal intensive care units appreciate the advantage of the medication port convenience included in extension set and feeding tube sets. Depending on your own internal protocol, having a medport on one or the other may be a set preference. However, one consideration to take into account is the duration of tubing

insertion time. A medication port on the feeding tube has a greater insertion time over the extension set, and may experience a clog or residual buildup over time, as opposed to the medport on a frequently changed extension set. This is especially true when particular medications have a thicker viscosity than others. To avoid these issues, our own extension set products implement a medication port near the distal tip closest to the feeding tube.

Should neonatal feeding tubes be changed frequently?

Due to the nature of available material construction of feeding tubes, the duration of acceptable time for insertion varies (see part 1 of 2, [Neonatal Enteral Feeding Tubes: Part 1](#)). However, many neonatal intensive care units consult documented studies to support their clinical decision in this matter. Some units change with each feed, while others will leave a 30-day feeding tube in for only two weeks. Of course, the main issue is bacteria biofilm developing in the tubing, and the contrasting concern of tissue damage for frequently replaced feeding tubes. Consider the below study for insight which may help answer this question for you, or at the very least contribute to your decision-making resources:

Neonatal enteral feeding tubes as loci for colonization by members of the Enterobacteriaceae: [click here to read this study](#)

Did you miss Neonatal Enteral Feeding Tubes: Part 1? Read it now:

[Click here](#)

Learn more about our Medela Enteral Feeding System feeding tubes, created specifically for the neonatal patient population:

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About the Author



Evi Dewhurst is a Senior Manager, Marketing Communications for Medela, Inc. As a proud mother of two young children, she is passionate about healthcare for youngsters everywhere and has a serious soft spot for babies. She is part of the dedicated team at Medela, who together are committed to designing and manufacturing products to advance human milk healthcare. Have a question? Evi can be reached at evi.dewhurst@medela.com