CHALLENGES OF NASOENTERIC TUBE BLOCKAGE



Clogged enteral feeding tubes are a significant barrier to effective nutrition delivery, hydration and medication to patients who cannot tolerate oral intake.¹

- Estimated that up to 35% of enteral tubes will become clogged¹
- Incidence of clogged feeding tubes range widely, from 12.5%-45% over the life of a tube²



Feeding tubes can clog for a variety of reasons-

Formula-related factors

- Formation of formula precipitate from contact with an acidic fluid³
- Stagnant formula/ accumulation of viscous feeding formula^{3,4}
- Contaminated formula³

Tube-related factors

• Feeding tube properties such as tube length, tube diameter (small lumen tubing) and usage-related factors such as tube kinking^{3,4,5}

Miscellanous

- Improper medication administration³
- Inadequate flushing⁴

Unresolved tube occlusions may result in-4

Formation of hard solid mass of enteral feeds ⁴	Tearing of tube ⁴	Direct administration of feeds to esophagus ⁴	Possible formation of esophageal bezoars ⁴
Need for tube replacement ⁴	Associated with increased costs		

Did you know?

A clogged tube not only interrupts nutrition but also creates discomfort for the patient in case they need to undergo an additional invasive procedure to replace the tube. In addition, the use of fluoroscopy to replace a clogged tube can cost as much as \$1000, while also exposing the patient to additional radiation. If the patient is in the home or long-term care setting, the clogged tube may necessitate a visit to the emergency department, further increasing patient burden and replacement cost. In addition to the impact on patients, clogged tubes require significant nursing time to resolve.¹

Addressing each of these potential causes for tube clogging will help ensure feeding tube patency and uninterrupted nutrition formula delivery.³

Recommendations for prevention of tube clogs Adequate flushing¹ Thorough Not mixing pulverization of tablets medications together prior to administration¹ prior to administration¹ Limiting residual checks¹ Maximizing diameter of Avoiding instilling acidic liquids through the tube lumen⁴ the tube¹ Increases flow and prevents accumulation⁴

Prevention of feeding tube clogs is preferred to manage a clogged tube.¹

Large bore (\geq 14 Fr) tubes are typically composed of stiff polyvinyl material and are least likely to clog, compared with a smaller bore feeding tube.⁶

Feeding tube properties for prevention of tube clogs

- More reliable for aspiration of gastric contents⁶
- Not indicated for primary use as an enteral feeding tube⁶
- As per manufacturer guidelines, these are indicated for suction, lavage, and/or decompression⁶

Tubes with an indication for enteral feeding are often small bore (8 Fr-12 Fr) and made of silicone, polyurethane, or a mixture of both components.⁶

- Clogging tends to occur less frequently with polyurethane feeding tubes compared with silicone tubes.³
- Silicone tubes have thicker walls, decreasing their internal diameters, thus increasing the chances of clogging³



AVANOS CORFLO* NG/NI feeding tube is a medical-grade polyurethane feeding tube that has been specifically designed for patient comfort and safety during tube insertion and use.⁷ The polyurethane construction makes them excellent for long-term intubation.⁸

AVANOS CORFLO* NG/NI feeding tubes are available in a wide variety of adult, pediatric and neonatal sizes, and come in both ENFit® and non-ENFit® variants.⁸



Features of the polyurethane material-8

- Offers larger lumen than silicone or PVC tubes of the same French size⁸
- Excellent for long-term intubation⁸

Comparison of tube internal diameter (ID) versus outer diameter (OD)



References

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