

CONSENSUS RECOMMENDATIONS FOR ADMINISTERING MEDICATIONS THROUGH AN ENTERAL FEEDING TUBE

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ADMINISTRATION TECHNIQUES

1. Oral administration of medications is preferred. Administer medications through enteral feeding tube only if the patient is unable, unwilling, or should not swallow.
2. Assure proper placement of feeding tube.
3. Elevate the head of the bed to at least a 30-45 degree position.
4. Medication delivered through a Y-site adapter can migrate backwards into the enteral feeding line and promote coagulation of certain enteral formulas. To avoid the above, disconnect the enteral formula line prior to medication instillation. Alternatively, the enteral feeding line may be left in place by using a stopcock valve or clamping/pinching the tubing directly above the Y-site adapter before administering medications.
5. Flush the feeding tube with a minimum of 10 mL of tepid water before and after administering medications (includes both liquid and crushed forms).
6. Whenever possible use a liquid form of medication.
7. Medication Dosage Forms
 - a. Liquid: Dilute liquid medications with at least 2-3 times the dosing volume before administering.
 - b. Immediate Release Tablets and Hard Gelatin Capsules: Crush immediate release tablets into a fine powder with a crushing device. For an immediate-release hard gelatin capsule, open the capsule and crush the contents into a fine powder if necessary. Do not dilute directly in the crushing device. Administer the crushed powder directly to the back of an open barrel syringe, replace the barrel, and draw tepid tap water into the syringe creating a slurry mixture, shake thoroughly, and administer immediately. Utilize a pill crushing syringe when available (note: dilution is appropriate in this device).
 - c. Soft gelatin immediate-release capsules: These capsules can be dissolved in warm water and then diluted/mixed with tepid water before administration. Because of the viscosity of some of these dosage formulations and the potential for tube clogging, change to an alternative dosage form or medication whenever possible.
 - d. Enteric coated or sustained release medications: Do not crush enteric coated or sustained release dosage forms or open sustained release capsules to administer through feeding tube. Consider alternative pharmacotherapy.

8. Give all medications separately, flushing the feeding tube with a minimum of 5 mL of tepid water between each medication.
9. Avoid adding medications directly to the enteral formula in the enteral feeding bag.
10. Hold enteral feeding 1-2 hours before and after administering carbamazepine, quinolones, phenytoin, warfarin, and other medications whose absorption is significantly impaired in the presence of enteral formulas. Monitor serum drug concentrations or other tests (e.g., INR) to verify drug activity.
11. While investigating causes for diarrhea in enterally fed patients, always review liquid medications for sorbitol content. If sorbitol is thought to be the cause of the diarrhea, consider changing dosage forms or an alternative medication. Also, review other medication-induced causes of diarrhea such as antacids, antibiotics, misoprostol, etc.

ALWAYS CONSULT WITH THE PHARMACY SERVICE/PHARMACIST:

1. To obtain the available liquid form of all medications for patients receiving their medications through a feeding tube.
2. To obtain an updated list, for reference on the nursing unit, of:
 - a. formula-medication compatibilities.
 - b. dosage forms that should not be crushed or administered through enteral feeding tubes.
 - c. liquid formulations that contain large amounts of sorbitol.
3. Regarding changes in dose and frequency when converting from solid to liquid medication forms and alerting physicians to these changes.
4. For alternatives to medications that cannot be administered through the enteral feeding tube.
5. Whether medications should be given with or in the absence of food and for how long to stop feeding, if appropriate.
6. Certain medications must be given in the stomach and others in the duodenum or jejunum for optimal activity. Consult the pharmacy for the best administration technique.

RECOMMENDATIONS FOR EDUCATION/PRACTICE

1. Establish policy/protocols for nursing practice based on research findings, recommendations from literature, and collaboration with Pharmacy.
2. Periodic competencies should be required for all staff who administer medications through enteral feeding tubes.