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Duloxetine Feeding Tube Administration

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From the Department of Pharmacy

March/April Issue

2025 Volume 13 Issue 2

Can the Contents of Duloxetine Capsules Be Administered Via a Feeding Tube?

By: Yasmeen Hamza, Pharm.D.

Introduction: Duloxetine (Cymbalta®), delayed-release capsules, contain enteric-coated pellets. The package insert for duloxetine states that the capsules should be swallowed whole and not chewed, crushed, or opened and that their contents should not be sprinkled on food or mixed with liquids because these actions might affect the enteric coating. Duloxetine is on the “Do Not Crush List” in UptoDate® Lexidrug™ and the Cleveland Clinic Health-System’s (CCHS) “Do Not Crush List”.

In-Vitro Study: A 2008 in-vitro study determined that a 20-mg duloxetine capsule maintained its potency, purity, and dissolution when mixed with applesauce and apple juice (pH ~ 3.5). The efficacy and safety for oral administration was not tested. If this method is to be used, it is important that the pellets maintain their integrity and not be crushed, chewed, or broken. This study found that the duloxetine pellets did not maintain their potency, purity, and dissolution when mixed with chocolate pudding (pH ~ 5.5-6).

Feeding Tube Request: A request to evaluate adding percutaneous endoscopic gastrostomy (PEG) and PEG/jejunostomy (JET) tube routes of administration to the duloxetine Epic drug record was submitted. Due to the data provided in the in-vitro study and anecdotal reports of the successful administration of duloxetine capsules through large bore tubes in patients coming in from long-term care facilities, the request was approved.

Changes in Epic: The Epic record for duloxetine contains options for PEG and JET tube routes of administration. The administration instructions for duloxetine were changed from “Swallow whole; Do not

crush, chew, or open” to “Capsules can be opened, but contents should be swallowed whole; Do not crush or chew”. The contents of duloxetine capsules can potentially clog fine bore feeding tubes. Therefore, Psychiatry recommends for patients taking duloxetine with fine bore tubes a switch to venlafaxine or fluoxetine to prevent withdrawal. A decision was made to maintain duloxetine on the CCHS “Do Not Crush List”.

Rising Pharma Information: A 2024 document from Rising Pharma, a manufacturer of delayed-release duloxetine capsule, supported the decision to add feeding tube routes of administration to the Epic duloxetine drug file. The document stated the following regarding duloxetine capsule administration:

- You may open the capsule and sprinkle the contents over one tablespoon (15 mL) of applesauce. Swallow the mixture right away and do not save any of the mixture to use later.
- You may open the capsule and pour the contents to an all-plastic catheter tip syringe and add 50 mL of water. Do not use other liquids. Gently shake it for 10 seconds, and then administer it through a nasogastric tube. Rinse with additional water (about 15 mL) if needed.

References:

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