

Lesson 3.20

Sublingual, Topical, and Rectal Medication Administration

Terminal Objective:

3.20 List concepts and principles of administering sublingual, topical, and rectal medications.

Enabling Objectives:

3.20.01 Define terms related to medication administration.

3.20.02 List patient safety, privacy, education, and comfort considerations when administering medications.

3.20.03 List the procedure for administering sublingual medications.

3.20.04 List the procedure for administering topical medications.

3.20.05 List the procedure for administering rectal medications.

3.20.06 List the procedure for documenting the administration of medications.

Non-parenteral medications are those that are given by routes other than by injection (intravenous, intramuscular, or subcutaneous). Medications given by mouth are the most common group of non-parenteral medication. The other routes of medication administration, sublingual, topical, and rectal, will be discussed in this lesson.

Sublingual route -- placing the medication under the tongue. The medication will be absorbed through the blood vessels under the tongue.

The sublingual route uses the thin epithelium and the rich network of capillaries on the underside of the tongue to gain rapid absorption and drug action. Drugs absorbed from the sublingual route have increased potency since they enter the bloodstream directly without being metabolized by the liver

or being affected by gastric and intestinal enzymes. The most common drug administered by this method is Glyceryl Trinitrate, also known as Nitroglycerin. The effects of medications administered sublingually are usually felt in one to five minutes. Patients are not allowed to eat, chew, drink, or smoke until the medication is dissolved and absorbed.

Topical route -- placing the medication on the skin or mucous membranes. Topical medications can have a local and/or a systemic effect, however, most are given for direct effect on the tissue to which the medication is applied. Ointments, lotions, oils, creams, and solutions are examples of topical medications.

Rectal route -- insertion of medication into the rectum. These medications are used primarily for their local effect(s) and include

suppositories, creams, and solutions (enemas). Rectal medications are used as an alternative to the intramuscular and intravenous routes. Due to an abundant surface blood supply, this route is particularly useful for children with fever or patients with nausea or vomiting.

A **suppository** is an oval or cone shaped solid substance designed for easy insertion into a body cavity. A suppository is designed to melt a body temperature. The most common indication for use is to promote the expulsion of feces and flatus.

An **enema** is the introduction of a solution into the large intestines. The most common type is a cleansing enema that is used to empty feces from the lower intestinal tract. An enema may also be used to relieve distention, for destruction of internal parasites, or to supply the body with fluids or nutrients.

PATIENT PRIVACY, SAFETY, EDUCATION, AND COMFORT

Patient care, always involves education, privacy, safety, and comfort. A full explanation of what is going to happen and why the procedure is necessary will help you obtain cooperation and ensure proper administration of the medication. Patients should know the purpose of the medication and the potential side effects. Always close the door and/or pull the curtains around the patient's bed for privacy. Expose only the areas necessary for the procedure. Remember to lock the bed wheels and to raise the opposite side rail to ensure the safety of the patient. Prior to administering any medication, ask if the patient has any allergies. Proper patient positioning will assist in accomplishing the procedure. For your (and the patient's) comfort and safety raise the bed to a comfortable working level.

Refer to Oral Medications lesson for detailed instructions regarding medication administration. The five drug rights and identification checks for patients apply to all medication administration.

ADMINISTERING SUBLINGUAL MEDICATIONS

Preparation of sublingual medication is done essentially the same as oral medication using the unit dose or floor stock system. When administering a sublingual medication you must have the patient's cooperation. He/she must be conscious and able to understand instructions. Never give sublingual medications to an unconscious patient. Help the patient into a sitting position (unless contraindicated) and instruct the patient to place the medication under the tongue. The patient should not eat, chew, or smoke until the medication is dissolved and absorbed. Remain with the patient, watching for possible side effects, until the medication is absorbed.

APPLYING TOPICAL MEDICATIONS TO THE SKIN

Wash your hands and don clean gloves to prevent absorption through your skin.. Cleanse the patients skin prior to application of a topical medication.

Topical medications are applied and absorbed through the skin in two ways. Oils, lotions, and ointments, are rubbed into the skin. This procedure is called inunction.

Transdermal topical medications are applied via a patch and are absorbed through the hair follicles and sweat glands. Place the patch on a non-hairy skin surface. The two best locations are on the chest wall or the upper arm of the patient. Since transdermal patches stay on the skin for extended periods of time, rotate application sites to avoid skin irritation. After administering the medication remove your gloves and wash your hands.

APPLYING TOPICAL MEDICATIONS TO THE EYES

Wash your hands. Cleanse the patients eyelid and lashes from inner to outer canthus using normal saline (NS) or water. Place the

patient in a supine or sitting position with the head tilted back and to the side on which administration will take place. Have the patient look away from you when the solution is administered so it will not enter the tear duct. Place a thumb or two fingers below the margin of the eyelashes under the lower lid and gently pull the lower lid down exposing the conjunctiva. Tell the patient to look up during administration of the medication. Instill drops into the center of the lower conjunctiva. Instill ointment by applying a ribbon of medication from the inner to the outer canthus of the lower eyelid. Do not allow the applicator to touch the eye at any time during administration of medication. If both drops and ointment are ordered, instill drops first and ointment last.

Following instillation, instruct the patient to gently close both eyes and move the eyes around. Instruct the patient not to rub his/her eyes. Wipe or sponge any excess medication from the patient's skin and wash your hands.

APPLYING TOPICAL MEDICATIONS TO THE EARS

Wash your hands and position patient with the affected ear up. Straighten the auditory canal of an adult patient by gently pulling the ear up and back. Straighten the auditory canal of a child patient by gently pulling the ear down and back. Instill the correct number of drops by directing the medication along the side of the ear canal, not directly on the eardrum. If ordered, place cotton loosely in the ear and instruct patient to remain in position for five minutes. Wash your hands.

Eye and ear instillation should be done with the medication at room temperature to avoid discomfort to the patient. Never return unused medication to the bottle, to prevent contamination of the remaining solution.

APPLYING TOPICAL MEDICATIONS TO THE NOSE

Wash your hands and position patient with his/her head tilted backwards. Unless contraindicated have the patient blow his/her nose before administering the medication. Instruct the patient to breathe through his/her mouth during administration of the medication. Draw enough solution into the dropper for both nares. Do not return unused solution to the bottle to avoid contamination of the remaining solution. Instill the correct number of drops by holding the dropper slightly above the nostril then carefully inserting the tip of the dropper into the nares. Instruct patient to remain in position and not to blow nose for five minutes. Wash your hands.

ADMINISTERING SUPPOSITORIES

Wash your hands and don clean gloves. Position the patient in the left Sim's position exposing only the buttocks. Remove the wrapper and lubricate the suppository and your gloved finger. Separate the buttocks so the anus is in plain view. Instruct the patient to take deep breaths to help relax the anal sphincters. Insert the suppository beyond the internal sphincter, about a finger length. The suppository should be in contact with the mucous membrane and should not be embedded in stool. Instruct the patient to retain the suppository until he/she has the urge to defecate, normally 15 to 45 minutes. Remove your gloves and wash your hands.

ADMINISTERING ENEMAS

The most common solutions for enemas are soap and water, normal saline, and a highly concentrated hypertonic solution. A hypertonic solution is commonly used to cleanse the lower intestinal tract for several reasons. Hypertonic solution draws fluid from body tissues into the bowel, so only a small amount of solution is needed (120 ml). These solutions are available in commercially

prepared, disposable containers. Hypertonic solutions minimize patient distress and fatigue. Patients can easily self-administer hypertonic enemas.

Wash your hands and don clean gloves. Position the patient in a knee-chest position, if not contraindicated. Otherwise position the patient lying in bed on his/her back or on either side. Insert the prelubricated tip completely within the rectum. While applying gentle, steady pressure on the solution container, instill the solution. Instillation should take one to two minutes, with results expected in two to eight minutes. Remove the gloves and wash your hands.

RECORDING THE ADMINISTRATION OF MEDICATIONS

Medication administration is recorded **AFTER** the medication has been administered. Routine medications are recorded on the front of the Medication Administration Record (MAR). On the back, top portion of the MAR, record single order, pre-op, and STAT medications. On the back, bottom portion of the MAR, record PRN medications. A Nursing Note is required for single order, pre-op, STAT, and PRN medications.