

ASORN Recommended Practice: Use of Multi-dose Medications

Purpose

To establish guidelines for registered nurses for use of multi-dose ophthalmic medications.

Statement

In compliance with standards set forth by the Centers for Disease Control, the preferred practice for ophthalmic medication administration is single-use/single-patient medications. However, many medications are available only in multi-dose form. Medications labeled as multi-dose may be used for more than one patient if, and only if, sterile technique, safe injection practices, and standard precautions are followed. Drug shortage or cost savings are never reasons to reuse single-use medications on multiple patients. Any medication labeled as single-use must be discarded immediately after use on a single patient. As always, patient safety and quality of care must come first when caring for the ophthalmic patient.

Procedure for Medications in Multi-dose Vials

Action	Rationale
1. Verify any medication allergies.	This prevents known adverse drug reactions.
2. Obtain the medication, check the expiration date, and verify with physician orders. Follow the Three Checks for Medication Confirmation and the Seven Rights of Medication Administration.	<p>The Three Checks for Medication Confirmation are performed:</p> <ol style="list-style-type: none">1. When reaching for the container.2. After obtaining and comparing the container with the physician orders.3. When replacing the medication in the drawer or before administration to the patient. <p>The Seven Rights of Medication Administration are the Right:</p> <ol style="list-style-type: none">1. Patient2. Medication3. Dose4. Time5. Route6. Reason7. Documentation
3. Always wash hands before administration of medications. If instilling more than one drop, utilize appropriate technique to prevent contamination (ie, do not touch medication bottle after patient contact unless hand hygiene has been performed).	Standard precautions and good hand hygiene must be used to prevent cross-contamination or the introduction of contaminants into the eye.

4. Explain the procedure to the patient.	This helps to establish trust and ensure patient safety.
5. Open the medication vial and remove the protective cap. Once the flip-top is removed, vigorously scrub the stopper with a sterile 70% isopropyl alcohol, ethyl/ethanol alcohol, iodophor, or other approved antiseptic swab. Allow the port to dry.	This action disinfects the vial stopper to prevent contamination.
6. Using a new needle and syringe, access vial and withdraw the medication using aseptic technique.	To follow safe injection practices, a new needle and new syringe must be used every time for every patient (per the Centers for Disease Control One Needle/One Syringe/One Time campaign).
7. Label the syringe if immediate use is not anticipated. Label should include the time of draw, initials of the person drawing the medication, name of the medication, concentration, dose, and expiration date or time.	Unlabeled syringes must be discarded since the contents cannot be confirmed.
8. Label the medication vial with the date and time opened, the initials of the person opening the vial, and the expiration date of the vial, not to exceed 28 days.	If the manufacturer's expiration date occurs prior to the 28th day, the manufacturer's expiration date must be used. Some medications may indicate an expiration date of less than 28 days once the vial has been accessed. Refer to the package insert of the medication for additional information.
9. When it is necessary to access an opened multi-dose vial, follow the same procedure as described in step 8, confirming the expiration date.	If the manufacturer's expiration date occurs prior to the 28th day, the manufacturer's expiration date must be used. Some medications may indicate an expiration date of less than 28 days once the vial has been accessed. Refer to the package insert of the medication for additional information.
10. Wash hands.	Per basic infection control / standard precautions.
11. Document medication in the patient record.	This is done for the purposes of risk management and continuity of care.

Procedure for Multi-dose Ophthalmic Drops and Ointments

Action	Rationale
1. Verify any medication allergies.	This prevents known adverse drug reactions.
2. Obtain the medication, check the expiration date, and verify with physician orders. Follow the Three Checks for Medication Confirmation and the Seven Rights of Medication Administration.	<p>The Three Checks for Medication Confirmation are performed:</p> <ol style="list-style-type: none"> 1. When reaching for the container. 2. After obtaining and comparing the container with the physician orders. 3. When replacing the medication in the drawer or before administration to the patient. <p>The Seven Rights of Medication Administration are the Right:</p> <ol style="list-style-type: none"> 1. Patient 2. Medication 3. Dose 4. Time 5. Route 6. Reason 7. Documentation
3. Always wash hands before administration of medications. If instilling more than one drop, utilize appropriate technique to prevent contamination (ie, do not touch medication bottle after patient contact unless hand hygiene has been performed).	Standard precautions and good hand hygiene must be used to prevent cross-contamination or the introduction of contaminants into the eye.
4. Explain the procedure to the patient.	This helps to establish trust and ensure patient safety.
5. Place the patient in a reclining or supine position.	This maximizes patient comfort and ease while instilling drops.
6. Before administering ophthalmic drops, remove the top of the bottle and place in a secure area, making sure not to contaminate the inside.	Contamination of the inside of the top of the bottle will contaminate the tip of the bottle once it is replaced, and it must then be discarded.
7. Instruct the patient to look up, keeping the eyes open.	Looking up with the eyes open reduces blepharospasm.

<p>8. Use an applicator or have the patient gently retract the lower lid with a clean finger. Instill a drop into the cul-de-sac.</p> <p>For infants and small children, separate the lids by gently pulling lids apart, keeping fingers/thumb on bony prominences. Do not apply pressure to the eye. (Use a finger and thumb of one hand to separate lids and the other hand to instill the drop.)</p> <p>If an infection is present or suspected, all medication used on that patient becomes single-use and should not be used on any other patients.</p>	<p>Retracting the lower eyelid creates a pocket into which medications can be instilled. Using an applicator or having the patient retract the lower lid prevents contamination of the nurse's hand. If the nurse has contact with the patient's skin or lashes and then handles the bottle or lid, the bottle and lid are now considered contaminated.</p> <p>If it is contraindicated or difficult to separate the eyelids, place a drop in the inner canthus with the patient in supine position until the eye is open.</p> <p>If the eye is reddened, contact the physician for evaluation before instilling any drops in the eye, as this may indicate an infection is present. Thereafter, drops should be used for this patient only and then discarded to prevent the possibility of cross-contamination.</p>
<p>9. Gently squeeze the dropper/bottle to instill the correct amount of medication into the cul-de-sac.</p>	<p>This ensures patient safety.</p>
<p>10. Avoid application of a drop directly on the cornea.</p>	<p>Some drops may cause inflammation of the cornea.</p>
<p>11. Never touch the tip of the bottle to the patient, lid, lashes, or surface of the eye.</p>	<p>If the tip of the bottle comes into contact with the patient, the bottle is considered contaminated and must either be used only for that patient or discarded.</p>
<p>12. If administering ophthalmic ointment, use an applicator or have the patient gently retract the lower lid with a clean finger.</p> <p>Hold the applicator end of the tube close to the eye and squeeze out a ribbon of ointment into the inferior cul-de-sac.</p> <p>If administering ophthalmic drops and ointment at the same time, ophthalmic ointment should be administered last.</p>	<p>Using an applicator or having the patient retract the lower lid prevents contamination of the nurse's hand. If the nurse has contact with the patient's skin or lashes and then handles the bottle or lid, the bottle and lid are now considered contaminated.</p> <p>Placement in the inferior cul-de-sac allows for better absorption of the medication.</p> <p>If ointments are administered first, they may inhibit the absorption of eye drops.</p>
<p>13. Have the patient gently close the eye to</p>	<p>Closing the eyes will facilitate distribution and</p>

distribute the medication evenly. Ask the patient not to squeeze the eyes shut.	absorption of the medication. Squeezing increases the lacrimal pump, shunting medication away from the eye. In most cases, closing the eyes gently can provide enough pressure to temporarily occlude the punctal drain.
14. Replace the top of the bottle or tube using aseptic technique.	If fingers/hands come into contact with the patient, do not touch the medication bottle without first washing hands. Contact by contaminated fingers/hands will contaminate the bottle/top. Keeping the container tightly closed will prevent possible contamination.
15. If a second medication is ordered, follow physician's orders or facility policy on time elapsed between administration of subsequent drops. Administer ophthalmic ointments last.	This allows for absorption of medication. When instilling more than one drop, make sure hand washing occurs between each drop, especially if other tasks have been performed, (eg, charting). If ointments are administered first, they may inhibit the absorption of eye drops.
16. Label the medication bottle or tube with the date and time opened, the initials of the person opening the vial, and the expiration date of the vial, not to exceed 28 days.	If the manufacturer expiration date occurs prior to the 28th day, the manufacturer's expiration date must be used. Some medications may indicate an expiration date of less than 28 days once the vial has been accessed. Refer to the package insert of the medication for additional information.
17. Wash hands.	Per basic infection control / standard precautions.
18. Document medication in the patient record.	This is done for the purposes of risk management and continuity of care.

Always use a new syringe and needle to access medication vials.

Always follow the manufacturer's directions for storage and use.

Always follow facility policy and procedure.

Always show the medication vial to the scrub nurse/tech before introducing it to the sterile field/back table verifying the name of the medication, concentration, dose, and expiration date.

Never draw up a medication and then lay the syringe down without labeling it.

Never use a medication if the sterility is in question.

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