# Instillation of Eye Drops and Ointments

## Overview

Ophthalmic medications may be used as:

- diagnostic agents.
- treatment agents of ocular conditions.
- adjuncts to surgical interventions.

Ointments are used for their lubricant property and to increase contact time of medication to the ocular surface. Ointments tend to blur the vision when first applied and, therefore, are often used at bedtime.

#### Objective

To deliver medication to the eye by way of ophthalmic drops or ointments.

## Equipment

Eye drops or ointment as ordered

Tissues

Action	Rationale
<ol> <li>Properly identify the patient. Compare wrist band to the chart/<i>e-record</i>, medication administration record (MAR) physician order</li> </ol>	8 Rights of Medication Administration Right patient, Right medication, Right dose, Right route, Right time, Right documentation, Right reason, Right response
2. Perform Hand Hygiene	2. Infection Prevention
3. Explain procedure to patient.	3. Patient safety
4. Have patient in sitting or supine position.	4. Position of comfort, decreases anxiety/ease in instilling drops.
<ol> <li>Instruct patient to tilt head backward (if in sitting position), open eyes and look up.</li> </ol>	5. Reduces blepharospasm.
<ul> <li>6. Expose the cul-de-sac in the lower eyelid by gently pulling downward on the skin over the cheekbone.</li> <li>a. For infants and small children, separate lids by placing thumb on bony prominence below lid, and index finger on bony prominence above lid. Gently pull lids apart. Do not apply pressure on eye.</li> </ul>	a. For infants and small children if it is contraindicated or difficult to separate the lids, place the drop of medication in the inner canthus and have the patient remain supine until opening the eye.
<ul> <li>7. Gently squeeze the dropper between your thumb and forefinger to instill correct amount of medication into the lower cul-de-sac.</li> <li>a. If using ointment, hold applicator end of tube close to the eye and squeeze out a 1/8-inch ribbon (about the size of a grain of rice).</li> <li>b. Do not touch the lid, lashes, or surface of the eye with the dropper or ointment tip to prevent contamination.</li> <li>Note: Bottle or tube is also considered contaminated if dropped on nonsterile surface with the cap off.</li> </ul>	<ul> <li>a. If unsure if the drop went in, use another drop. Overdosing will not occur.</li> <li>b. If contaminated, <b>discard</b>; do not use on multiple patients if the bottle becomes contaminated. Use separate medication bottles perioperatively and for patients with a known infection.</li> </ul>

<ul> <li>8. Punctual occlusion: <ul> <li>a. Ask patient to close both eyes gently without squeezing.</li> </ul> </li> <li>b. Alternatively, place your finger over the patient's lacrimal sac and apply light pressure for 1 minute or more (or instruct patient to do this, if able).</li> </ul>	<ul> <li>a. Squeezing increases the lacrimal pump, shunting the medication away from the eye. In most cases closing the eyelids provides enough pressure to temporarily occlude the punctual drain.</li> <li>b. Digital punctual occlusion is indicated when (1) systemic absorption of medication may prove harmful to the patient (e.g., atropine, phosphine iodide, betablockers such as timolol or betaxolol, or antineoplastic agents such as mitomycin or thiotepa used in treatment of pterygia, (2) prolonged corneal-drug contact is desired, or (3) taste or feeling of ocular medication in the nasopharyngeal mucosa is distressing to the patient.</li> </ul>
<ol> <li>If using ointment, hold lower lid down while ointment melts, then ask patient to blink gently several times.</li> </ol>	<ol> <li>If patient blinks immediately, much of the ointment is expressed out of the cul-de-sac. Blinking gently distributes the melted ointment over the cornea.</li> </ol>
10.Gently wipe away tears and excess medication with soft gauze or tissues.	10. Do not apply direct pressure to eyelid or rub eye.
11. If administering more than one medication to the eye, ask patient to close eyes for 30 seconds after each drop.	11. Allow time for absorption.
Administer ophthalmic ointment last. Wait 5 minutes between instillation of medications (or per MD order).	Petroleum based ointments can inhibit absorption of liquid eye drops if subsequently administered.
12. Date newly opened bottle or tube of ointment.	<ol> <li>Policy to establish length of time to use drops or ointment after being opened should follow federal, state and accreditation guidelines and regulations.</li> </ol>
13. Perform hand hygiene	13. Infection prevention
14. Document in e-medical record/paper chart	14. Risk management. Continuity of care.

# Bibliography

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