# NURSING PROCESS FOCUS:
Patients Receiving LATANOPROST (Xalatan)

## Assessment
Prior to Administration:
- Obtain complete health history including allergies, drug history and possible drug interactions.
- Assess for history/presence of glaucoma
- Obtain vital signs
- Patient's and/or significant other's understanding of glaucoma and the medication used to treat

## Potential Nursing Diagnosis
- Injury, risk for, related to blurred vision, side effects of medication
- Pain, Risk for Acute, related to side effects of medication
- Infection, Risk for, related to contaminated eye drops or faulty technique
- Knowledge, Deficient, related to no previous lack of contact with medication, inadequate teaching, lack of understanding of proper use of medication
- Noncompliance, related to inconvenience and side effects of medication

## PLANNING: PATIENT GOALS and EXPECTED OUTCOMES
Patient will
- Demonstrate ability to function safely within own environment as evidenced by lack of injuries from falls or other accidents.
- Demonstrate intraocular pressure readings within the normal range.
- Demonstrate understanding of proper use of latanoprost
- Remain free of pain during drug therapy
- Maintain compliance with treatment regimen

## Implementation
<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
<th>Patient Teaching/Discharge Planning</th>
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</thead>
<tbody>
<tr>
<td>Monitor development of eye pain. (May indicate worsening of condition.)</td>
<td>Instruct patient to immediately report occurrence of persistent eye pain to health care provider.</td>
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<tr>
<td>Use proper technique to instill eye drop(s) (To provide safe and effective use of drug.)</td>
<td>Instruct patient and caregiver regarding proper position for instilling eye drop(s): tilt head toward side of affected eye; gently pull lower lid down; have patient look up; instill ordered number of drops into sac formed by lower lid.</td>
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<tr>
<td>Give medication as ordered. Be aware that latanoprost is almost always given one drop in affected eye at HS daily and question prescribing health care provider if ordered otherwise.</td>
<td>Advise patient latanoprost is usually administered one drop in affected eye at HS unless specifically advised by prescribing health care provider to do otherwise.</td>
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<tr>
<td>Review all intraocular pressure reading reports.</td>
<td>Advise patient that intraocular pressure readings will be done prior to beginning treatment and periodically during treatment.</td>
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</table>
- Monitor for pigmentation changes. (There is a potential complication of latanoprost therapy.)

**Advise patient that:**
- More brown color may appear in iris and in periorbital tissue of treated eye only and if this occurs to report it to treating health care provider.
- Pigmentation changes, if they occur, usually develop over months to years.

- Monitor for side effects: blurred vision, burning, stinging, redness, photophobia, lashes adjacent to treated eye may thicken. Report to health care provider.

**Instruct patient:**
- Concerning side effects and report to health care provider immediately if any occur
- That he/she may have feeling of foreign body in eye

### Evaluation of outcome criteria
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).
### NURSING PROCESS FOCUS:
**Patients Receiving TIMOLOL MALEATE OPHTHALMIC (TIMOPTIC)**

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<th>Potential Nursing Diagnosis</th>
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<tr>
<td>• Obtain complete health history including allergies, drug history and possible drug interactions.</td>
<td>• Cardiac output, decreased, related to systemic absorption of timolol.</td>
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<tr>
<td>• Assess for presence or history of glaucoma, chronic respiratory disorders, cardiovascular disorders, eye irritation, vision changes.</td>
<td>• Knowledge, deficient, related to lack of previous contact with this medication.</td>
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<tr>
<td>• Obtain vital signs.</td>
<td>• Noncompliance, related to knowledge deficit, inability to purchase medication, side effects.</td>
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<th>Planning: Patient Goals and Expected Outcomes</th>
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Patient will:

• Experience decreased intra-ocular pressure without experiencing clinically significant systemic effects (to include decreased cardiac output, dyspnea, hypoglycemia, etc.) or increased visual impairment.

• Maintain safety within his/her environment.

• Demonstrate understanding of proper use of timolol and potential side effects.

### Implementation

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<td>• Monitor for glaucoma. (Only approved use of timolol maleate ophthalmic preparations is to decrease intra-ocular pressure in patients with glaucoma.)</td>
<td>Advise patient that:</td>
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<td>• Intraocular pressure checks will be performed prior to and periodically during treatment because intra-ocular pressure increases may recur during therapy.</td>
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<td>• It is vital that he/she keep all appointments.</td>
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• Monitor for cardiovascular problems. (If the medication is absorbed systemically, it will worsen these conditions.)

• Monitor for COPD and other respiratory problems. Use with caution if patient has any respiratory problems. (If the medication is absorbed systemically, it can lead to pulmonary edema.)

• Monitor for eye irritation. (Could be a side effect of medication.)

• Advise patient to note and report immediately any increased breathing problems, including dyspnea, feeling of not being able to catch his/her breath, chest pain, etc.

• Instruct patient to note and report any redness, dry eyes, blurred vision, diplopia, ptosis, itching to health care provider.
Monitor blood glucose. (If timolol maleate is absorbed systemically, it can mask symptoms of hypoglycemia.)

Advise diabetic patient:
- Check blood sugar routinely and report changes
- Have routine lab studies performed
- Recognize usual symptoms of hypoglycemia: fatigue, restlessness, irritability, weakness, malaise, mental status changes, coma

Monitor self-administration techniques. (Proper usage will decrease chances of systemic absorption, and concomitant problems.)

Instruct patient and caregiver to use medication exactly as ordered, to wash hands thoroughly prior to using medication, not to touch dropper to eye or surrounding tissue.

Monitor OTC medication use. (Patient should not use OTC preparations containing a-adrenergic stimulants, including cold medications and nasal decongestants, without health care provider approval; could cause increased stimulation of cardiovascular system.)

Teach patient:
- How to read labels on OTC medications, and to consult pharmacist if assistance is needed.
- Not to use OTC medications without health care provider approval

**Evaluation of Outcome Criteria**
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).