

NGN NCLEX 2026 • VISUAL REFERENCE

Cataracts

Sensory • Ophthalmologic • Surgical Care

HIGH-YIELD

PERIOPERATIVE

EYE PHARMACOLOGY

PATIENT EDUCATION

ADULT HEALTH

Source disclosure: *Cataracts was not included in Diane's uploaded reference notes for this session. Content compiled from Saunders Comprehensive Review for the NCLEX–RN (8th ed.), ATI RN Adult Medical–Surgical Nursing, Lippincott Illustrated Reviews: Pharmacology, and American Academy of Ophthalmology (AAO) Preferred Practice Pattern: Cataract in the Adult Eye. Eye-drop administration technique cross-references the uploaded Eye Drugs #2 notes (inner-to-outer canthus rule, conjunctival sac placement, nasolacrimal pressure).*



Definition & Overview

WHAT IT IS • WHY IT MATTERS

DEFINITION

A **cataract** is a progressive **clouding (opacity) of the lens** of the eye, which blocks light from reaching the retina and causes painless, gradual loss of vision.

WHY IT MATTERS

Leading cause of **treatable blindness worldwide** and the most common cause of vision loss in adults >40. Surgery is one of the most frequently performed and successful procedures in the U.S.

CLASSIC PATTERN

PAINLESS • PROGRESSIVE • BILATERAL (though one eye usually worse). Vision change is gradual over months to years — not sudden.

TYPES

Senile (age-related, most common) • **Congenital** (in newborns) • **Traumatic** • **Secondary** (diabetes, steroids, UV, smoking).

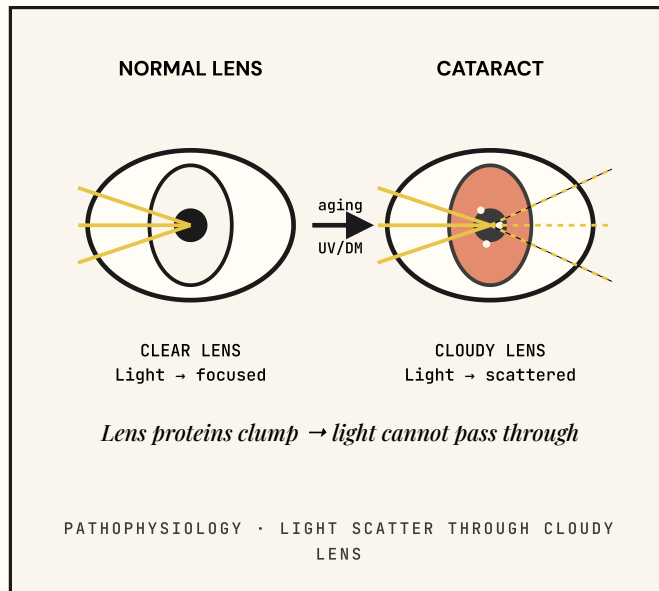
NCLEX Anchor: *Cataracts = painless & cloudy. Glaucoma = painful pressure & tunnel vision. Macular degeneration = painless & central vision loss. Retinal detachment = painless, sudden, "curtain" with flashes & floaters.*

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Pathophysiology

STEP-BY-STEP MECHANISM

- 1 **Trigger:** Aging, UV light, oxidative stress, hyperglycemia, steroids, or trauma damages the proteins (crystallins) of the lens.
- 2 **Protein denaturation:** Crystallin proteins clump, oxidize, and lose transparency.
- 3 **Lens opacity:** The lens becomes cloudy, yellow-brown, and dense.
- 4 **Light scatter:** Light entering the eye is scattered instead of focused → *blurred vision & glare/halos*.
- 5 **Vision loss:** Image on the retina becomes dim, hazy, and color-shifted → progressive functional impairment.



Risk Factors / Causes

Aging (#1)

UV exposure

Diabetes mellitus

Long-term corticosteroids

Smoking

Eye trauma

Heavy alcohol use

Family history

Congenital (rubella in utero)

Prior eye surgery



Signs & Symptoms

EARLY VS LATE • RECOGNITION CUES

EARLY (Mild)

- ✓ **Blurred / cloudy / hazy vision** — "looking through a foggy window"
- ✓ **Glare & halos around lights** (especially headlights at night)
- ✓ Decreased color perception — colors appear faded, yellow, or brown-tinged
- ✓ Difficulty reading fine print or seeing in dim light
- ✓ Frequent changes in eyeglass prescription
- ✓ Double vision *in the affected eye only* (monocular diplopia)
- ✓ Improved near vision temporarily ("second sight" — refractive shift)

LATE (Severe)

- ▲ **Significant, progressive vision loss**
- ▲ **Visible cloudy/white pupil** on inspection (mature cataract)
- ▲ Loss of red reflex on ophthalmoscopic exam
- ▲ Inability to read or recognize faces
- ▲ Increased risk of falls & injury
- ▲ Functional blindness in affected eye if untreated



RED FLAGS — Not Cataracts! Investigate Other Causes

- **Eye PAIN** → think acute angle-closure glaucoma, infection, or trauma
- **SUDDEN vision loss** → think retinal detachment, stroke, or central retinal artery occlusion
- **Flashes of light + floaters + "curtain"** → retinal detachment (ophthalmologic emergency)
- **Loss of peripheral / tunnel vision** → glaucoma
- **Central vision loss / wavy lines (metamorphopsia)** → macular degeneration

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Priority Nursing Interventions

PRE-OP • POST-OP • ABC FRAMEWORK

PRE-OPERATIVE

- 1 **Assess baseline visual acuity** in both eyes & document
- 2 **Review allergies** — especially iodine, latex, anesthetics
- 3 Confirm **NPO status** (usually 6–8 hr if sedation) & consent signed
- 4 Verify **correct eye** with surgical team — mark per protocol
- 5 Administer **mydriatic + cycloplegic drops** (dilate pupil, paralyze accommodation)
- 6 Hold anticoagulants only if HCP orders (usually *continued* for cataract surgery — confirm)
- 7 Reduce anxiety; surgery is brief (~30 min) under local + IV sedation
- 8 Have patient void before procedure

POST-OPERATIVE

- 1 **Eye shield/patch on operative eye** — especially when sleeping × several weeks
- 2 **Position: HOB elevated 30–45°**; sleep on *back or unaffected side*
- 3 **AVOID INCREASES IN IOP** — no bending below waist, no lifting >5–10 lb, no straining, no vigorous coughing/sneezing (sneeze with mouth open)
- 4 Administer **antibiotic + corticosteroid + NSAID eye drops** as prescribed
- 5 Pain control: mild discomfort is *normal*; **SEVERE pain = report immediately** (suspect hemorrhage or ↑ IOP)
- 6 Antiemetics PRN — vomiting raises IOP
- 7 Wear dark **wraparound sunglasses** outdoors
- 8 NO rubbing, scratching, or pressure on the eye
- 9 Monitor for infection: drainage, redness, ↑ pain

ABCs & Safety Prioritization

A

Airway: Post-op nausea/vomiting raises IOP — give antiemetics promptly and position to prevent aspiration.

B

Breathing: Teach to sneeze with mouth *open* and avoid forceful coughing (both increase IOP and risk dehiscence).

C

Circulation / Eye Hemorrhage: Sudden severe eye pain, ↓ vision, or bleeding = call HCP immediately — risk of intraocular hemorrhage.

S

Safety: Fall precautions — depth perception is reduced with one patched eye. Clear path, adequate lighting, assistive devices.

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Pharmacology

PRE-OP & POST-OP EYE DROPS

DRUG / CLASS	MECHANISM	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
Tropicamide Phenylephrine Atropine Mydriatic / Cycloplegic	Dilate pupil & paralyze ciliary muscle (cycloplegia) to allow surgical access to the lens. "M-D" = <i>Mydriatic</i> = <i>Dilate</i> .	Photophobia, tachycardia, ↑ BP (phenylephrine), blurred near vision, dry mouth, urinary retention (atropine)	Caution in narrow-angle glaucoma. Apply pressure to nasolacrimal duct 30–60 sec to reduce systemic absorption. Wear sunglasses post-instillation.
Moxifloxacin Gatifloxacin Ofloxacin Antibiotic eye drops	Bactericidal — prevent post-op endophthalmitis (severe intraocular infection)	Local irritation, stinging, transient blurred vision	Start 1–3 days <i>pre-op</i> , continue 1–2 weeks <i>post-op</i> . Wash hands. Don't touch dropper to eye. Wait 5 min between different drops.
Prednisolone Dexamethasone Corticosteroid drops	↓ post-op inflammation & uveitis	↑ IOP with prolonged use, delayed healing, ↑ infection risk, posterior subcapsular cataract (with long use)	Shake suspension well. Taper as ordered — do not stop abruptly. Monitor IOP. Hyperglycemia in diabetics.
Ketorolac Bromfenac Nepafenac NSAID eye drops	↓ inflammation & pain; prevent cystoid macular edema (CME)	Stinging on instillation, delayed corneal healing, bleeding risk	Use cautiously with anticoagulants. Continue 4–6 weeks post-op as ordered.
Acetazolamide (Diamox) Carbonic Anhydrase Inhibitor	↓ aqueous humor production → ↓ IOP. Used if IOP rises post-op.	Diuresis (most common), paresthesias, hypokalemia, metabolic acidosis	Monitor electrolytes & I&O. Sulfa allergy = contraindicated. <i>Cross-reference: Eye Drugs #2 — Diamox most common SE = diuresis.</i>
Ondansetron Promethazine Antiemetic	Prevent vomiting (vomiting ↑ IOP & risks suture rupture)	Headache, sedation, QT prolongation (ondansetron)	Give PRN at first sign of nausea. Critical post-op intervention.



Eye-Drop Administration (per Eye Drugs #2 notes):

- Place drops in **lower conjunctival sac**, NOT directly on cornea
- Hold dropper **½ inch above** the eye — do not touch dropper to eye
- Apply gentle pressure to **nasolacrimal sac (inner canthus)** for **~1 min** after instillation to reduce systemic absorption
- Wait **5 minutes between different eye drops**
- For irrigation: flow from **inner to outer canthus**
- For ointments: apply to **lower inner lid**, then have patient close eye



NCLEX Test Traps

COMMON MISTAKES • WRONG VS RIGHT

x COMMON MISTAKE

"Cataracts cause eye pain and pressure."

✓ CORRECT ANSWER

Cataracts are **PAINLESS**. Pain in the eye = think glaucoma, infection, or trauma — NOT cataract.

x COMMON MISTAKE

"Sleep on the affected side to protect the dressing."

✓ CORRECT ANSWER

Sleep on the **UNAFFECTED side** (or supine). Pressure on the operative eye risks suture damage and ↑ IOP.

x COMMON MISTAKE

"Tell the patient that mild pain post-op is an emergency."

✓ CORRECT ANSWER

Mild discomfort/scratchiness is **expected**. **SEVERE** or sudden pain = call HCP immediately — possible hemorrhage or ↑ IOP.

x COMMON MISTAKE

"Apply drops directly onto the cornea."

✓ CORRECT ANSWER

Place drops in the **lower conjunctival sac** — direct corneal contact damages the surface and triggers blinking, ejecting the drop.

x COMMON MISTAKE

"Encourage the patient to bend over to retrieve dropped items."

✓ CORRECT ANSWER

AVOID bending at the waist, lifting >5–10 lb, straining (Valsalva), and vigorous coughing/sneezing — all ↑ IOP.

x COMMON MISTAKE

"Vision will return to normal immediately after surgery."

✓ CORRECT ANSWER

Vision improvement is **gradual** over days to weeks. Final correction (glasses) may be prescribed 4–6 weeks post-op.

x COMMON MISTAKE

"Sudden vision loss with flashes and floaters is a cataract symptom."

✓ CORRECT ANSWER

That's **retinal detachment** — an emergency. Cataracts are gradual, painless, and do NOT cause flashes/floaters.

x COMMON MISTAKE

"Use cotton swabs and tissues to clean the eye."

✓ CORRECT ANSWER

Use a **clean, damp cloth** — **wipe inner to outer canthus**, one wipe per stroke. No rubbing or pressure.



Patient & Family Education

PRE-OP • POST-OP • LIFESTYLE



Eye Shield / Patch

Wear shield at bedtime & during naps for 1–2 weeks. Do **not** rub or press on the eye.



Positioning

Sleep on your **back or unaffected side**. HOB up 30–45°. Avoid lying flat on the operative side.



Activities to Avoid

No bending below the waist, no lifting >5–10 lb, no straining, no vigorous exercise, no sex × 1 week.



Sneeze & Cough

Sneeze with mouth **open**. Avoid forceful coughing. Don't strain during bowel movements — use stool softeners.



Sunglasses

Wear **dark wraparound sunglasses** outdoors (light sensitivity from dilation + UV protection).



Eye Drops

Wash hands. Drops in **lower sac**. Wait 5 min between drops. Press nasolacrimal duct 1 min after.



Hygiene

Showers OK after 24 hr — keep water/soap out of eye. No swimming, hot tubs, or hair washing tilted forward × 1 week.



Driving

NO driving until HCP clearance — usually after first post-op visit (24–48 hr).



Call HCP If...

Severe pain • sudden vision loss • flashes/floaters • purulent drainage • ↑ redness • bleeding.



Prevention

UV-protective sunglasses, smoking cessation, blood-glucose control, limit chronic steroids, regular eye exams.



Memory Boosters

MNEMONICS · PATTERN RECOGNITION

"C-L-O-U-D-Y" — S/S of Cataracts

C

Cloudy / blurred vision

L

Light glare & halos at night

O

Opaque / white pupil (late)

U

Unilateral diplopia (monocular)

D

Decreased color & depth perception

Y

Yellow/brown tinted vision

"AVOID" — Post-Op Don'ts

A

Activity strenuous (no lifting >5–10 lb)

V

Valsalva & vomiting (↑ IOP)

O

Over-bending at the waist

I

Itch / rub the eye

D

Driving until cleared

👁️ **Eye Disease Quick-Compare:** *Cataract = painless, cloudy lens, foggy vision. Glaucoma = painful, ↑ pressure, tunnel vision (lose periphery). Macular degeneration = painless, central vision loss. Retinal detachment = painless, sudden, flashes + floaters + curtain.*

💡 **Position Pearl:** *"Sleep on the side that can SEE." Patient sleeps on the unaffected side — pressure off the operative eye.*

👁️ **Mydriatic vs Miotic (per Eye Drugs #2):** *Mydriatic = Dilate (the "y" looks like a wide pupil). Miotic = constrict (small pupil — used for glaucoma). For cataract surgery, we want the pupil DILATED to access the lens → MYDRIATICS.*

⚠️ **Pain Rule:** *Cataract = NO pain. Glaucoma = YES pain. If the question says "painful eye + halos around lights" → think GLAUCOMA, not cataract.*



NCJMM Clinical Judgment Scenario

NEXT GENERATION NCLEX • 6-STEP MODEL

Case:

A **72-year-old client** is admitted to the same-day surgery unit on **POD#1 follow-up** after right-eye **phacoemulsification with intraocular lens (IOL) implantation**. The client reports the surgery went well yesterday but called the clinic this morning with concerns. The nurse takes the following report at the bedside.

1

RECOGNIZE
CUES

Assessment Data

Client states: *"My right eye is throbbing — much worse than last night. I see flashes of light and there's a dark curtain over the bottom of my vision. I bent over this morning to pick up my slipper."*

- Vital signs: BP 168/92, HR 98, RR 20, T 98.6°F, SpO₂ 96%
- Pain: **8/10**, sharp, right eye
- Right eye: red conjunctiva, eye shield in place, no purulent drainage
- Reports nausea, took no antiemetic; vomited × 1 this morning
- Last dose of post-op eye drops missed (forgot)
- PMH: HTN, type 2 DM, on warfarin for AFib

2

ANALYZE
CUES

Clinical Significance

- **Severe pain (8/10) post-op:** Normal is mild scratchiness — severe pain = RED FLAG for hemorrhage or ↑ IOP
- **Flashes + curtain in vision:** Classic symptoms of **retinal detachment** — a sight-threatening emergency
- **Bent over:** Activity that ↑ IOP and risks suture rupture / vitreous traction
- **Vomiting:** Further ↑ IOP & risks wound dehiscence
- **HTN (168/92):** Elevated BP ↑ bleeding risk; warfarin compounds this
- **Missed eye drops:** ↑ infection & inflammation risk

3

PRIORITIZE
HYPOTHESES

Most Likely → Least Likely

- **#1 PRIORITY — Retinal detachment** (flashes + curtain + recent surgery + Valsalva trigger) — emergency
- **#2 — Intraocular hemorrhage / ↑ IOP** (severe pain + HTN + warfarin + vomiting)
- **#3 — Suture rupture / wound dehiscence** (bending, vomiting)
- **#4 — Endophthalmitis** (less likely without purulent drainage/fever, but missed antibiotic drops raise risk)

4

GENERATE
SOLUTIONS

Anticipated Interventions

- Notify **ophthalmologist STAT** — possible emergent surgery
- Keep client supine, head still, NPO pending evaluation
- Reapply eye shield; **NO pressure** on the eye
- Administer prescribed **antiemetic** (e.g., ondansetron IV) to stop further vomiting
- Administer prescribed **analgesic** — avoid NSAIDs/aspirin systemically (bleeding risk on warfarin)
- Treat hypertension per orders to ↓ bleeding risk
- Prepare for possible **tonometry** (IOP measurement) and dilated fundoscopic exam
- Hold warfarin per HCP order; check INR
- Reinforce post-op precautions and resume eye-drop schedule

5
TAKE
ACTION

Nurse Implementation

- Call ophthalmology on-call provider; communicate findings using **SBAR**
- Position client supine, head still, eye shield in place
- Administer ondansetron 4 mg IV as ordered
- Administer prescribed analgesic; document response
- Reassess pain, vision, vital signs every 15 min
- NPO until evaluated by surgeon
- Provide reassurance, explain plan; reduce anxiety (anxiety raises BP & IOP)
- Document all findings, interventions, and provider notifications

6
EVALUATE
OUTCOMES

Expected Outcomes

- **Pain** decreases to $\leq 3/10$ within 30–60 min
- **No further vomiting** after antiemetic
- **BP** trends toward baseline ($<140/90$)
- Client seen by ophthalmologist; **retinal status determined** & treatment plan initiated (laser, scleral buckle, or vitrectomy if detachment confirmed)
- No further visual deterioration; flashes/curtain do not progress
- Client verbalizes understanding of post-op restrictions & eye-drop schedule
- Eye shield remains intact; no signs of hemorrhage or infection at next reassessment

Cataracts • NGN NCLEX 2026 Visual Reference

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