

Assessing Angles with a Transilluminator

Purpose:

To assess anterior chamber depth and determine if a patient is safe for dilation.

Equipment:

Penlight or transilluminator.

Notes:

- Perform without glasses or contact lenses.
- **Room lights should be off.**

Cautions:

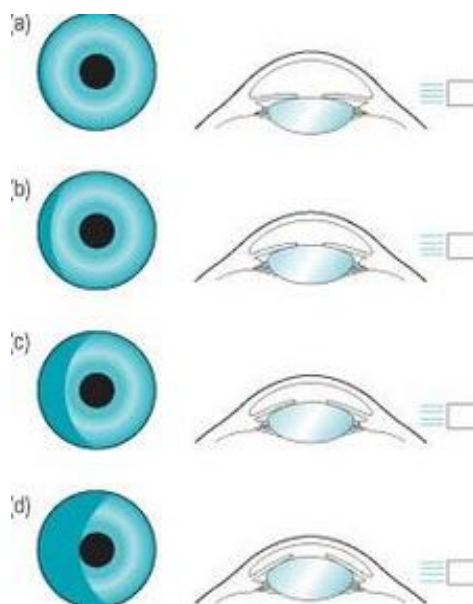
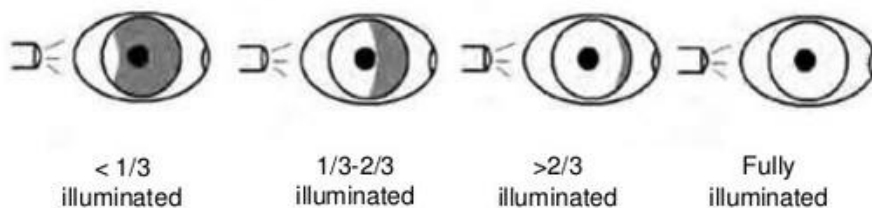
1. Corneal reflections can cause glare—adjust light angle accordingly, especially in dark irises.
2. If narrow angles are suspected, consult a resident or attending before dilation.

Testing Process:

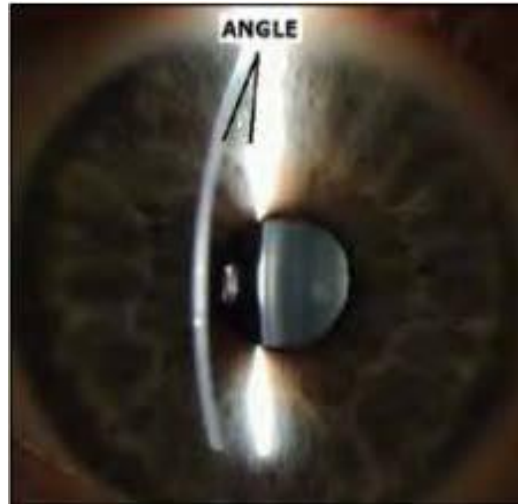
Shine the light from the temporal canthus across the eye toward the nasal iris. Observe the shadow on the nasal iris:

- A deep chamber = full illumination.
- A shallow chamber = partial shadow or significant darkness.

If in doubt, defer to a supervisor before proceeding.



Assessing Angles with Slit Lamp (Van Herrick Technique)

**Purpose:**

To assess anterior chamber depth using the slit lamp and determine if the patient is safe for dilation.

Equipment:

Slit lamp.

Notes:

- Perform without correction (including contacts).
- Room lights should be dim.

Cautions:

1. Use a properly sized slit beam to avoid misjudging angle depth.
2. If angles appear narrow, consult a resident or attending before dilation.

Testing Process:

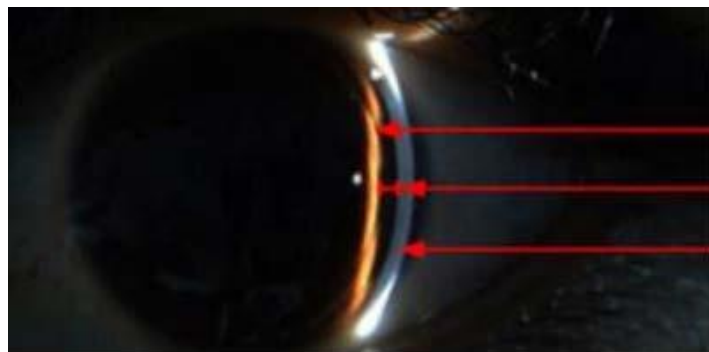
- Seat the patient at the slit lamp; ensure chin and forehead are positioned properly.
- Turn on the slit lamp and set the beam to a tall, thin slit (approx. 8 mm, low illumination).
- Adjust the illumination angle to ~60°.
- Use the base for large movements and the joystick for fine adjustments.
- Project the beam into the anterior chamber and observe the space between the corneal and iris reflections.
- The widest space will appear centrally, indicating the deepest part of the chamber.
- Project the slit beam onto the temporal limbus and observe the light reflexes.

VAN HERRICK'S GRADING SCALE:

- 1:1 – Open angle, VH grade 4
- 1:1/2 – Open angle, VH grade 3
- 1:1/4 – Narrow angle, VH grade 2 (Angle Closure Possible)
- 1: <1/4 – Angle closure likely, VH grade 1

This means that at least one-half of the thickness of the light reflex on the cornea should be able to fit into the space created by the two reflexes to have the angle be considered open. Anything less than that should be checked by a physician.

Project the slit beam onto the nasal limbus to observe the angle as well.



Light reflex on iris

Anterior Chamber Depth

Light reflex on cornea
(corneal thickness)



Narrow Angle-angle closure
is likely.

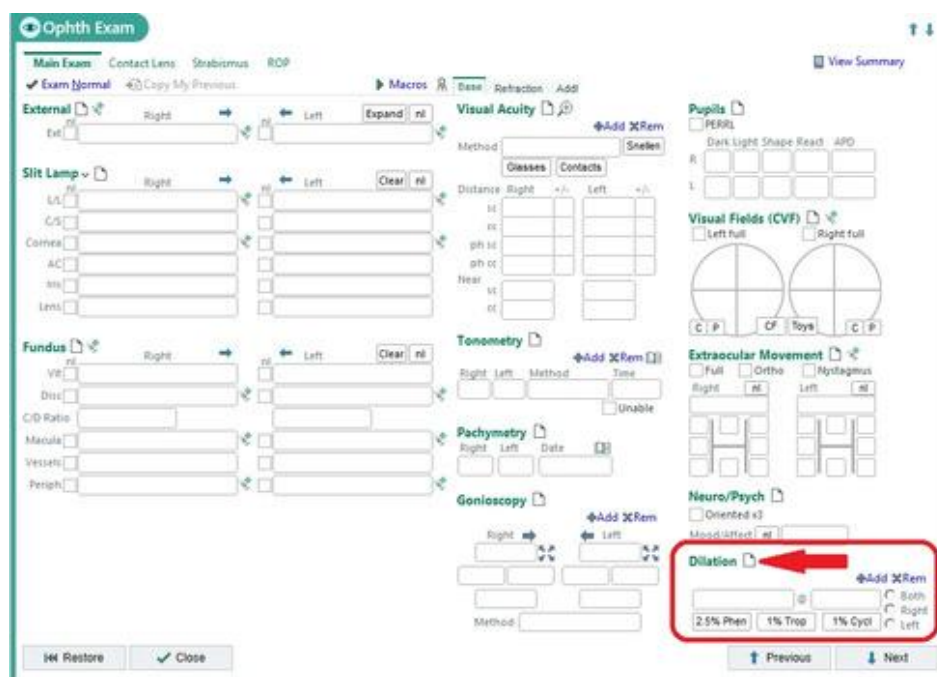


Open Angle- angle closure
is not likely.

Interpretation and Documentation:

- If both the temporal and nasal iris are illuminated, the angle is likely open.
- If the nasal iris is not illuminated (less than 2/3 visibility), this may indicate a narrow angle—do not dilate.
- Document narrow or questionable angles in Epic under the Dilation note.
- Notify a resident, fellow, or attending to reassess.
- If cleared for dilation, document: “OK to dilate per Dr. [Name]”.

Documentation:



The screenshot shows the 'Ophthalmic Exam' form in the Epic EMR system. The form is organized into several sections for documenting different parts of an eye exam. The 'Dilation' section at the bottom right is highlighted with a red box and a red arrow, indicating where to document dilation status. The form includes fields for patient information, exam type, and various clinical findings. The 'Dilation' section has checkboxes for 'Both', 'Right', and 'Left', and a 'Method' field.