

NCLE PRACTICAL EXAM REVIEW

William Underwood, Ph.D., NCLEM

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ABO & NCLE Practical Exams

- The one hour practical assessment examinations were designed and developed by groups of Certified Opticians and Certified Contact Lens Fitters/Technicians with assistance from an independent testing service.
- The purpose of these Exams is to apply the knowledge previously demonstrated by the candidates to skills and abilities associated with the performance of tasks required for the professional practice of Opticianry and/or Contact Lens Technology.
- Each exam has thirty questions.

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ABO & NCLE Practical Exams

- Question Criteria Exam questions fall into four general categories:
- 1. Those that require immediate recognition of the correct response through correct identification of instrumentality and basic problem solving
- 2. Those that require understanding and/or utilization of basic instrumentality
- 3. Those that require candidates to comprehend patient interaction and demonstrate appropriate problem-solving based upon information presented by video vignettes of patient interactions
- 4. Those that require recognition of basic fundamental knowledge in the field of Opticianry and/or Contact Lens Technology.

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ABO & NCLE Practical Exams

- ABO & NCLE provides a fully-interactive ABO & NCLE Tutorial and Practice Exam Question Area.
- You can learn about the types of virtual reality questions available on the ABO-NCLE Practical Examinations and how to utilize the Lens Meter, Slit Lamp, and many other on-line virtual instruments utilized on the ABO & NCLE Practical Examinations.
- https://www.abo-ncle.org/ABO/Exam_Information/Practical_Exams/Practical_Exam_Tutorial/ABO/Practical_Exam/Practical_Exam_Tutorial.aspx?hkey=b53962d8-5427-4cf4-9cd7-2074c6c91d9c

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ABO & NCLE Practical Exams

- ABO & NCLE provides a Practical Slideshow to allow candidates to understand the functionality and type of questions for each item within the ABO and NCLE Practical Examinations.
- <https://www.slideshare.net/JamesMorris153/abo-ncle-practical-exam-slideshow-tutorial>

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Exam Costs

- Current cost for the ABO & NCLE Practical Exams is \$75.00 per exam or a total of \$150.00

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NCLE Practical: Keratometry

Keratometry Practice

Determine the K Reading for this patient's right eye.

1. Set occluder.
2. Focus eyepiece.
3. Level keratometer with respect to outer canthus.
4. Align keratometer with center of cornea.
5. Focus the mires, and refine level and alignment as needed.
6. Find K reading, using axis scale and measuring drums.



Select the "Next" arrow to begin.

Back

Next

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NCLE Practical: Keratometry

Adjusting the Eyepiece



MENU



Screen 4/11

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NCLE Practical: Keratometry

Practice Adjusting the Eyepiece

When the screen activates, go to the Transparent View and set the occluder.



Top View

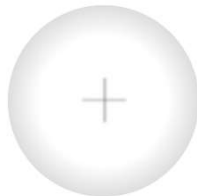
Transparent View

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NCLE Practical: Keratometry

Practice Adjusting the Eyepiece

When the screen activates, go to the Transparent View and set the occluder.



Top View

Transparent View

MENU



Screen 5/11

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NCLE Practical: Keratometry

Leveling and Aligning



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NCLE Practical: Keratometry

Leveling and Aligning



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NCLE Practical: Keratometry

Taking the K Reading



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NCLE Practical: Keratometry

Taking the K Reading

K Reading: Horizontal 43.25D Axis 40°
Vertical 42.00D Axis 130°

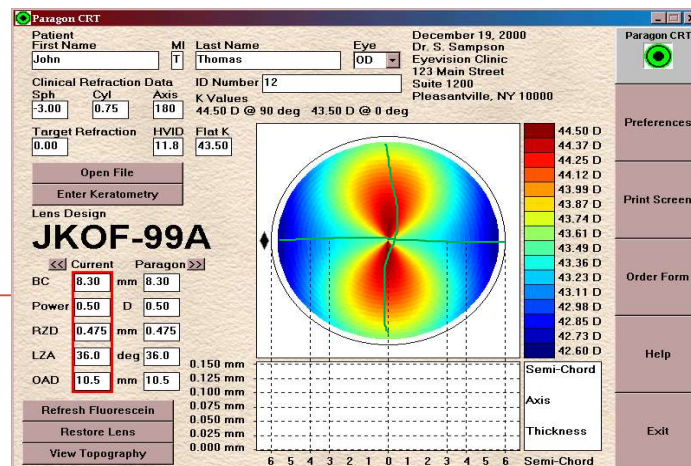


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Types of Astigmatism: Corneal

- Regular: Meridians 90 Degrees Apart
 - “With the Rule” Flattest “K” @ 180 Degrees (+/- 30 Degrees) ex: 41.00@180 / 43.00@90
 - “Against the Rule” Flattest “K” @ 90 Degrees (+/- 30 Degrees) ex: 45.00@180 / 42.00@90
 - “Oblique” Flattest “K” between 30 & 60 or 120 & 150 Degrees ex: 42.50@35 / 44.75@125
- Irregular: Flattest & Steepest meridians are notably more or less than 90 Degrees Apart ex: 41.00@180 / 42.00@60

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Regular With The Rule Astigmatism

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SLIT LAMP OPERATION

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Slit Lamp Evaluation

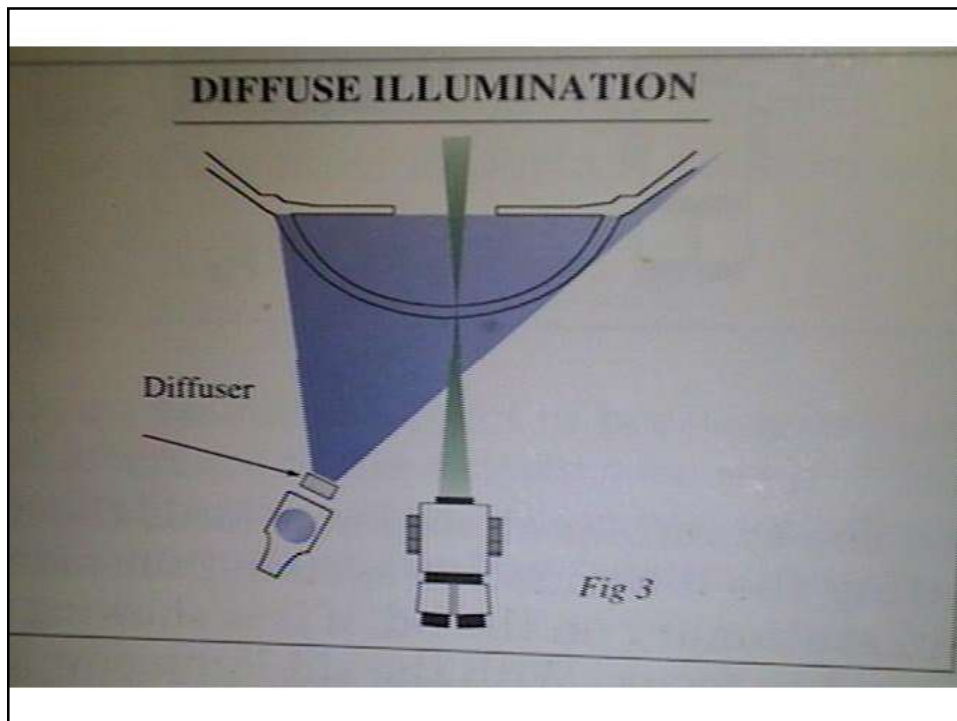
- Diffuse: General Observations, Lens Evaluation
- Direct Focal:
 - Parallelpiped: Edema, Vertical Striae, Opacities, Vascularization, Precorneal Film Debris, Abrasions, Staining, Endothelium Pigment Deposits, Foreign Bodies.
 - Optic Section: Layers of cornea, Thickness of cornea, Depth of abrasion or imbedded foreign body
- Retro: Microcysts, Neovascularization
- Specular Reflection: Endothelial Changes.
- Sclerotic Scatter: Edema, Opacities

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Diffuse

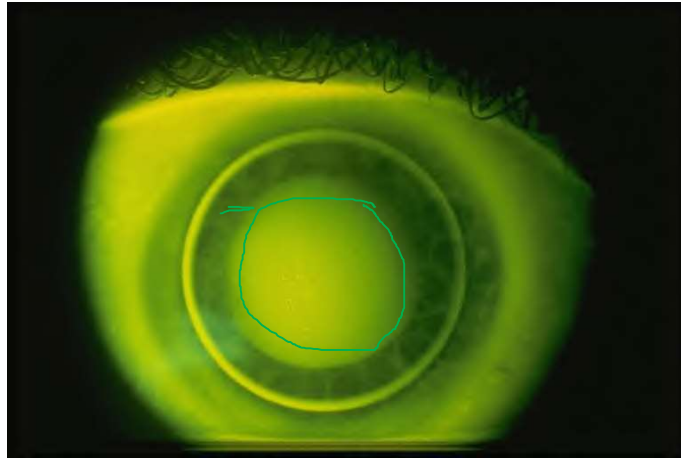


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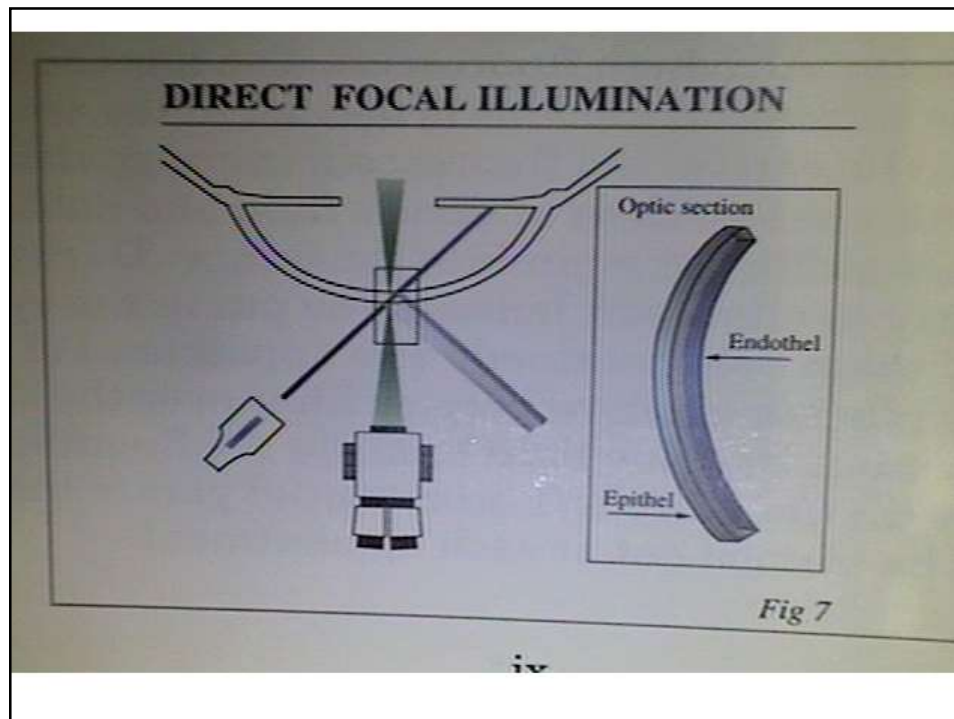


20

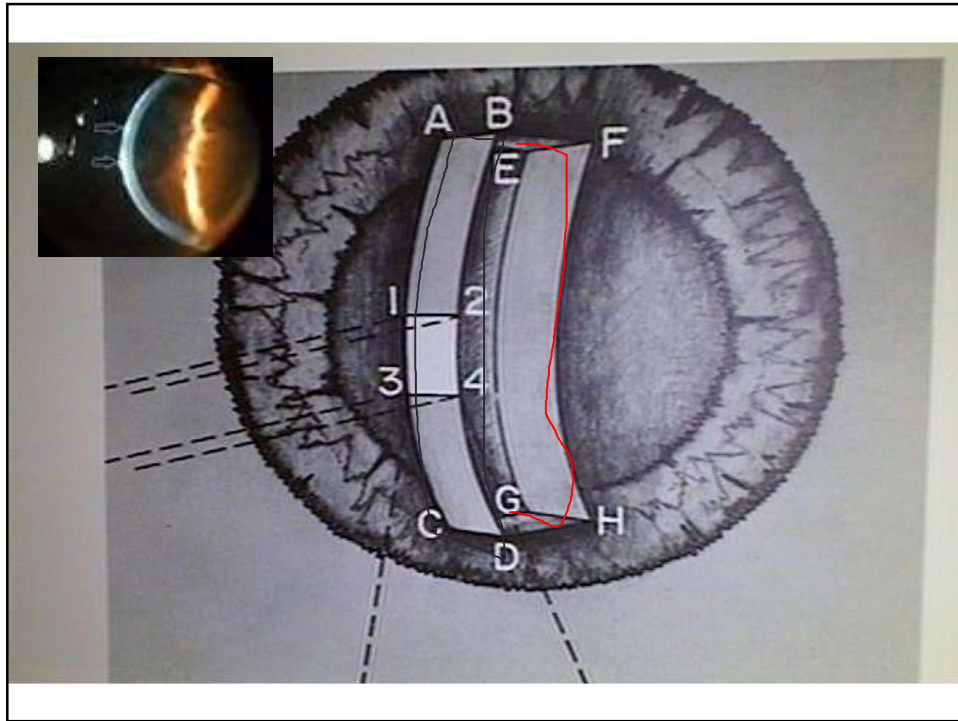
Diffuse Illumination: Fluorescein Pattern



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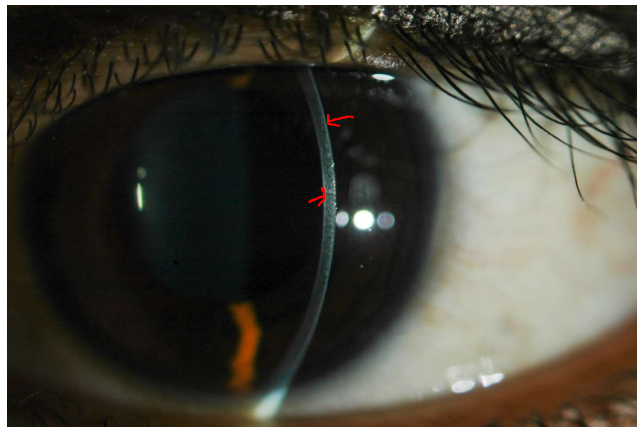


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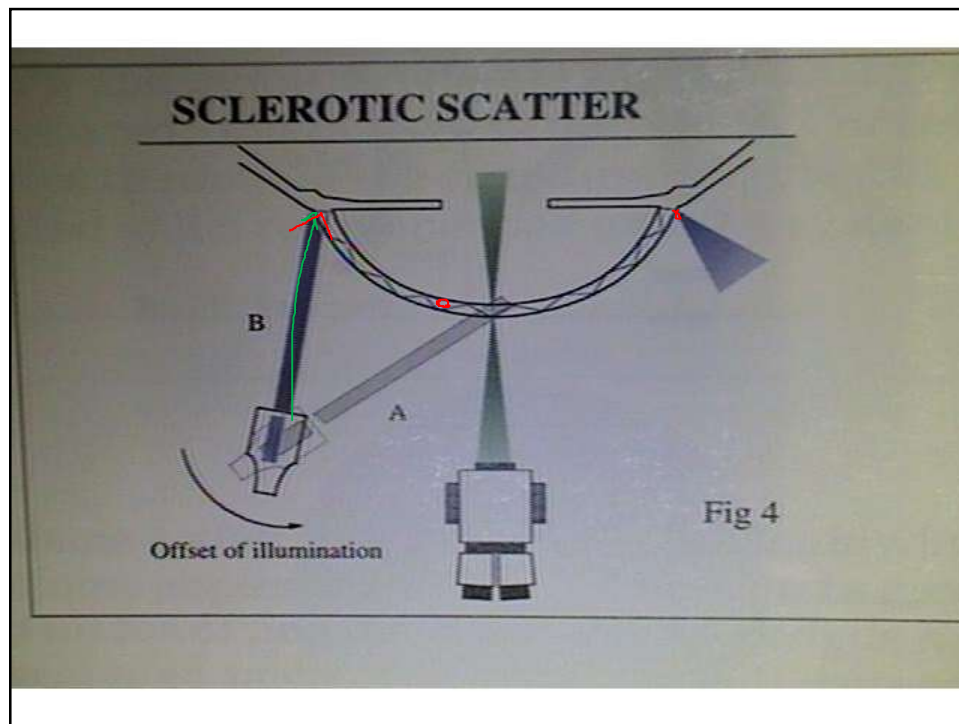


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Optic Section

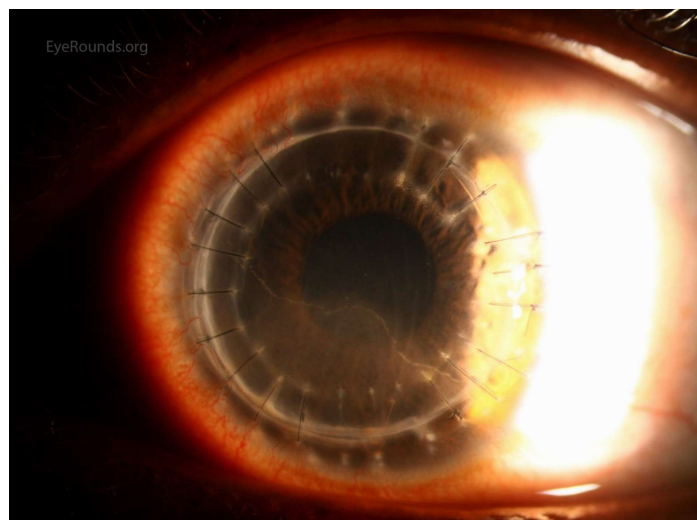


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Sclerotic Scatter



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NCLE Practical: Slit Lamp



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NCLE Practical: Slit Lamp

- Ocular Conditions
- Lens Fit
 - GP
 - Soft
- Lens Damage

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Ocular Conditions: Lid Margins

- Blepharitis
- Plugged meibomian glands
- Trichiasis
- Lacrimal lake quantity and quality

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Ocular Conditions: Conjunctiva

- Palpebral:
 - Injection, Conjunctivitis, Concretions, Cysts, Papillae, Follicle
- Bulbar:
 - Pingueculas, Pterygium, Cysts, Dry or Pigmented Areas, Injection

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Ocular Conditions: Cornea

- Direct Focal:
 - Parallelepiped: Edema, Vertical Striae, Opacities, Vascularization, Precorneal Film Debris, Abrasions, Staining, Endothelium Pigment Deposits, Foreign Bodies.
 - Optic Section: Layers of cornea, Thickness of cornea, Depth of abrasion or imbedded foreign body
- Retro: Microcysts, Neovascularization
- Specular Reflection: Endothelial Changes.

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NCLE Practical: Slit Lamp

Simulation Functions



Screen 5/13

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NCLE Practical: Slit Lamp

Illuminations

Simulations

- Direct Focal Parallelepiped
- Retro
- Diffuse

Width Control
2 = Retro &
Direct Focal Parallelepiped
20 = Diffuse



Screen 7/13

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Diffuse

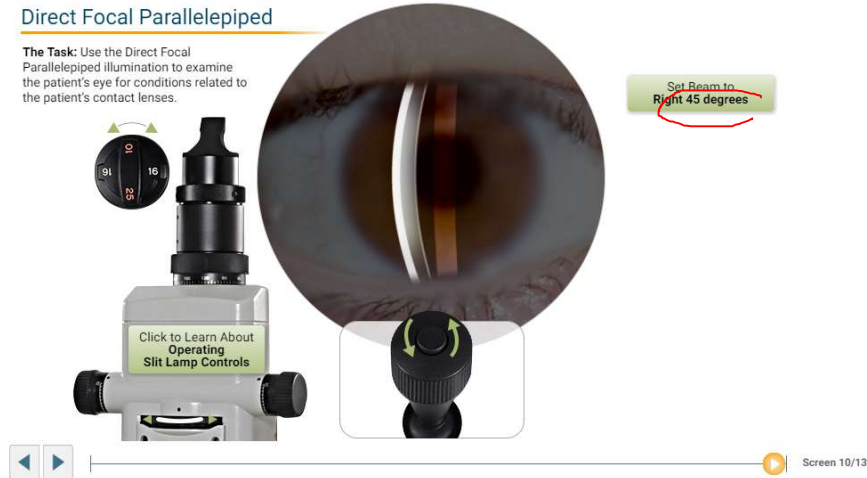


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NCLE Practical: Slit Lamp

Direct Focal Parallelepiped

The Task: Use the Direct Focal Parallelepiped illumination to examine the patient's eye for conditions related to the patient's contact lenses.



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NCLE : Staining

Compare Your Observations



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NCLE: Neovascularization

Simulation

Determine whether neovascularization is present in the right eye.

Set Beam to Left 45 degrees



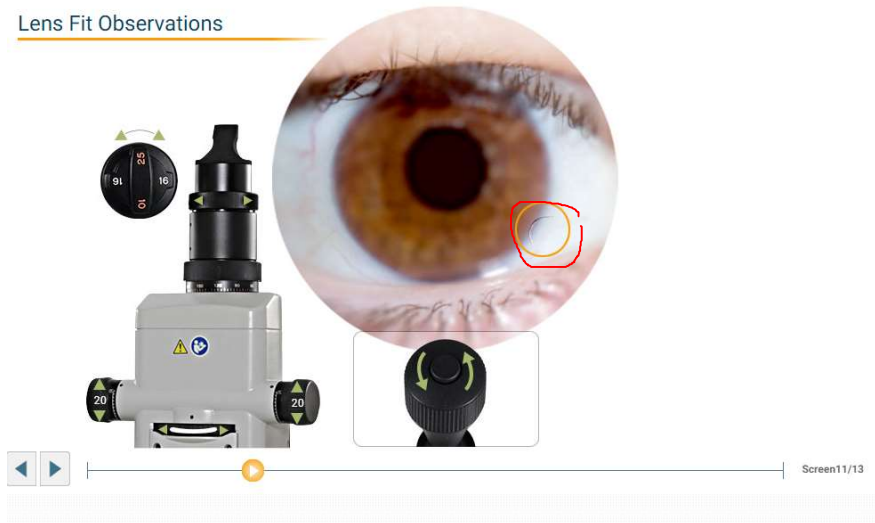
Select one or more of the following conditions, depending on what you observed in the Slit Lamp. Then submit your answer(s).

- ☐ Neovascularization is present at 5:00.
- ☐ Neovascularization is present at 7:00.
- ☐ No neovascularization is present.

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NCLE Practical: Slit Lamp

Lens Fit Observations



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NCLE Lens Fits

- Patient History & Video
- GP Fluorescein Pattern (Use cobalt filter)
 - Well fit, Steep, Flat
 - Type of Astigmatism
- Soft
 - Well fit, Tight, Loose

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NCLE : GP Fit



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NCLE Soft Lens Fit

Simulation

Determine whether the lens is well fit, too loose or too tight.



Select the description that best describes the fit of the lens you examined.
Then submit your answer.

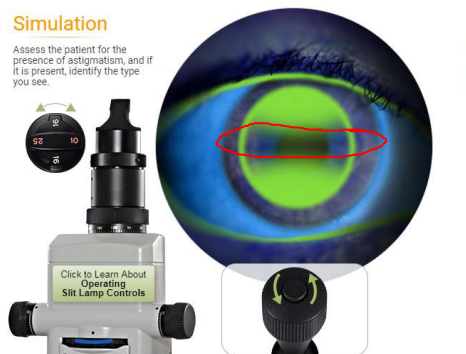
- ☐ Well-fit
- ☐ Too loose
- ☐ Too tight

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NCLE GP Fit, Type of Astigmatism

Simulation

Assess the patient for the presence of astigmatism, and if it is present, identify the type you see.



Select one of the following conditions, depending on what you observed in the Slit Lamp assessment.
Then submit your answer.

- ☐ The eye has a spherical cornea.
- ☐ The eye has with the rule astigmatism.
- ☐ The eye has against the rule astigmatism.

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NCLE: Lens Damage

- Deposits
- Damage

Simulation
Determine whether Lens Deposits, Lens Damage, or Lens Inversion are present.

Click to Learn About Operating Slit Lamp Controls

Return to Your Objective

Set Beam to Right 45 degrees

Select one or more of the following conditions, depending on what you observed in the Slit Lamp.
Then submit your answer(s).

- ☐ Lens deposits
- ☐ Lens damage
- ☐ Lens Inversion
- ☐ No deposits, damage or edge lift

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PATHOLOGY AND EVALUATING CONTACT LENS FITS

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NCLE Practical

- Hot Spot questions where you need to click on the condition.

Choose the Apple



In this example, if the candidate clicks anywhere inside of the area represented by the red square, the answer is correct. Anywhere outside of the area of the apple would be an incorrect answer.

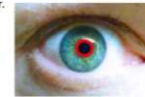


Anatomy and Pathology

Candidates are expected to be familiar with eye anatomy and pathology, and to identify certain conditions of the eye. By way of example, only, a candidate may be required to identify the pupil utilizing ABO-NCLE's "hotspot" technology questions



In this example, if the candidate clicks anywhere inside of the area represented on this image by the red circle, the answer is correct. Anywhere outside of the circle would be an incorrect answer.



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NCLE Practical

- Images of contact lens fits and conditions
- Videos of contact lens fits and conditions

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GPLI.info Fitting & Problem Solving

- <http://www.gpli.info/gp-fit-eval-prob-solve/>

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Alcon

- Alcon Academy a great resource from Alcon.
- <https://2.myalcon.com/professional/resources/education/alcon-academy-eye-care-excellence>

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Healthy Eye



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Pathology: Ocular Conditions

- Lids
- Conjunctiva
- Cornea



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Questions?

William Underwood, Ph.D., ABOM, NCLEM
underwoodptedu@gmail.com