## **Astigmatism Diagnosis**

Examining a patient with astigmatism typically involves a comprehensive eye examination performed by an optometrist or ophthalmologist. Here are the general steps involved in examining a patient with astigmatism:

- 1. Patient history: the first step is to gather the patient's medical and ocular history. This includes information about any previous eye conditions, eyeglasses, surgeries, or injuries, as well as any current symptoms, visual complaints, or family history of eye problems.
- 2. Visual acuity measurement: the patient's visual acuity is assessed using an eye chart. The patient is typically asked to read letters or symbols from a distance 6 meter to determine their ability to see clearly and identify details.
- Refraction test: this test determines the patient's refractive error, including astigmatism using a device called <u>autorefraction</u> and <u>retinoscope</u>.



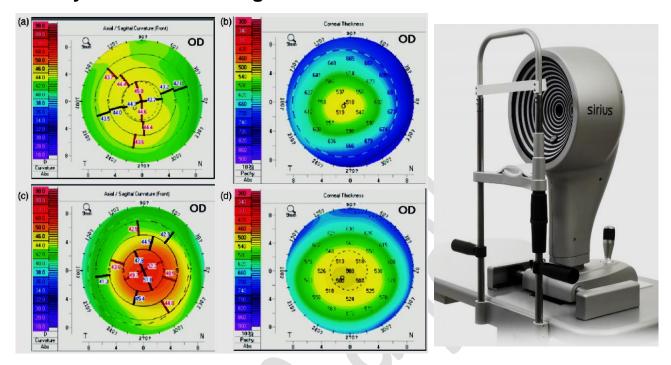


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2023/08/22 17:31:48
NO: 13302
NAME:
[REF]
             UD: 12.0
      Cyl. Form: (-)
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             CYL
                   AX
     -0.75
           -0.25
                   37A
     -0.75
            -0.25
                   33A
     -0.75
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AUE -0.75
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     SPH
            CYL
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           -0.75 156A
     -0.50
    -0.25
           -0.75 151A
    -0.25 -0.75 154A
    -0.25 -0.75 152A
AUE -0.25 -0.75 153
PD = 67mm
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4. Keratometry: this device measures the curvature of the cornea; this test helps determine the degree of corneal astigmatism. It involves using a keratometer that projects rings of light onto the cornea and measures the reflection patterns.



5. Corneal topography: this advanced test maps the surface of the cornea in detail, providing a three-dimensional representation. It helps identify irregularities or abnormalities in corneal shape that may contribute to astigmatism.



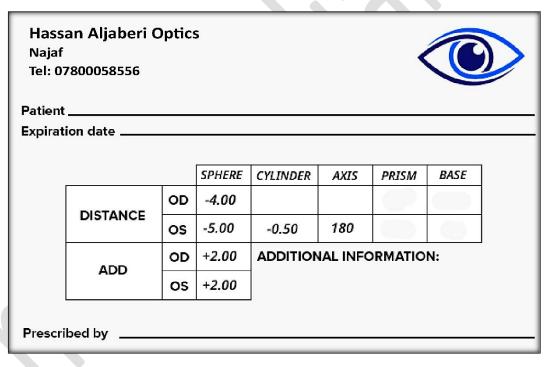
6. Slit-lamp examination: A slit lamp is a specialized microscope that allows the examiner to examine the structures of the front of the eye, including the cornea, iris, and lens. This examination can help identify any signs of corneal irregularities, scarring, or other abnormalities that may cause or contribute to astigmatism.



## How to use a trial case with an astigmatism patient

Based on the initial results obtained from the autorefractor or retinoscope:

- ✓ Select a spherical and cylindrical lens from trial case.
- ✓ Cylinder axis determination: Using the patient's responses during subjective refraction, determine the axis of astigmatism by rotating the cylindrical lens in front of the patient's eye until the clearest vision is achieved.
- ✓ Final prescription: Once the best visual acuity is obtained, the final prescription is determined. It includes the spherical power, cylindrical power, and axis of astigmatism correction for each eye.



✓ Follow-up: Schedule a follow-up visits to assess the patient's adaptation to the new prescription and make any necessary adjustments or modifications.