Ocular Sussman Four Mirror Handheld Gonioscope

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Image Mag</th>
<th>Contact OD</th>
<th>Lens Height</th>
<th>Ring Diam</th>
<th>Static Gonio FOV</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS4M</td>
<td>.94x</td>
<td>9mm</td>
<td>24.5mm</td>
<td>24.3mm</td>
<td>80°</td>
</tr>
<tr>
<td>OS4M-2</td>
<td>.94x</td>
<td>9mm</td>
<td>28.5mm</td>
<td>31.5mm</td>
<td>80°</td>
</tr>
</tbody>
</table>

Designed with: Walter Sussman, M.D., Bellmore, NY
U.S. Patent #4,033,679
Reference: Optometric Management Vol. 35, No. 6, June 2000

Design

- The Sussman Four Mirror Hand Held Gonioscope combines the most favorable features of multi-mirror gonioscopes.
- It is lightweight and directly hand held which lends itself naturally to delicate maneuvers while observing the angle.
- The smaller contact surface is particularly useful in compression gonioscopy.
- Gonioscopic solution is not required to create an optical interface.
- The lens can be sterilized and used in the operating room for intraoperative gonioscopy.
- The lens consists of a highly truncated pyramid with a plano anterior viewing surface over 4 mirrors inclined at 64°.
- The mirrored surfaces are silvered with an exclusive double layer, protective coating to prevent peeling and damage under normal daily use.
- The posterior surface of the lens has a base curve of 41.5D and a diameter 9mm.
- A serrated finger grip, or ring, extends 1mm above the anterior surface to provide protection.
- The Sussman Four Mirror Hand Held Gonioscope is also available with a larger holding ring.
- Lenses also available in select colors. Contact Ocular Instruments for further information.

Technique

- Gonioscopy can be accomplished using one of two methods.
  - Method 1: Place the gonioscope on the eye with mirrors arranged perpendicular and planar to horizon.
    - Observation is begun in the inferior angle using the superior mirror.
    - Next, lower the slit lamp beam to the inferior mirror to check the superior angle.
    - Finally, with the beam horizontal and tilted, observe the angle near the 180° meridian.
  - Method 2: Place the gonioscope on the eye with the mirrors arranged obliquely (diamond position). In this orientation, nearly all of the angle can be observed.
    - With the slit lamp beam vertical, simply move the slit lamp from right to left across the two superior mirrors.
    - Next, lower the beam and move the slit beam from left to right across the two inferior mirrors. Complete observation of the angle can be quickly achieved with minimal rotation of the lens (11° in either direction) is needed to view the small sections of angle, which were missed during the initial sweep.
- Because of the light weight and small size of this gonio lens, it is easily applied to the eyes of small children and individuals with narrow palpebral fissures.
- Deliberate compression with the gonioscope (dynamic gonioscopy) gives the observer a certain amount of control over the iris configuration.
- In an eye with a relatively narrow angle, deeper structures can be visualized by flattening the periphery of the iris gonioscopically.
- It is also used to distinguish between true peripheral anterior synechiae and simple apposition of the iris to the cornea.
- The center axis may be used to view the posterior pole and disc.
**Cleaning**

Rinse: Immediately upon removal from patient's eye, thoroughly rinse in cool or tepid water.
Wash: Place a few drops of mild soap on a moistened cotton ball. Gently clean with a circular motion.
Rinse: Thoroughly rinse in cool or tepid water, then dry carefully with a non-linting tissue.
Then: Proceed with either disinfection or sterilization instructions.

**Disinfection**

<table>
<thead>
<tr>
<th>Soak In:</th>
<th><strong>GLUTARALDEHYDE</strong></th>
<th>OR</th>
<th><strong>BLEACH</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2% or 3.4% aqueous solution</td>
<td></td>
<td>10% solution mixed at:</td>
</tr>
<tr>
<td></td>
<td>Temperature per manufacturer instructions</td>
<td></td>
<td>1 part bleach to 9 parts water</td>
</tr>
<tr>
<td></td>
<td>Minimum exposure time = 20 minutes</td>
<td></td>
<td>Recommended exposure time = 10 minutes</td>
</tr>
</tbody>
</table>

**Caution** To avoid damage to the lens, do not exceed recommended exposure time.

Then: Rinse lens *thoroughly* to remove disinfection solution.
3 cycles of 1 minute, with cool or tepid water is recommended.
Dry carefully and place in a dry storage case.

**NOTE** This lens is known to be compatible with: Ascepti-Wipe, Cavi-cide, Cidex, Cidex OPA, DisCide Wipe, Enviro-cide, and Opti-Cide

**Caution** *If used on an ulcerated cornea, lens must be STERILIZED before next procedure.*

**Sterilization**

<table>
<thead>
<tr>
<th>AUTOCLAVE</th>
<th>STERRAD</th>
<th>STERIS SYSTEM 1</th>
<th>ETO</th>
<th>ETO Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Minimum Time</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Temperature</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aeration Time</td>
</tr>
<tr>
<td>WARNING</td>
<td></td>
<td></td>
<td>See Right</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

*Never Steam Autoclave or Boil listed lenses. Never soak in Alcohol, Acetone or Other Solvents.*

For information on compatibility with alternative product care methods, contact Customer Service.