GAS PERMEABLE BIFOCAL LENSES

FITTING GUIDE

Unlike Soft Multifocals with a Near central design, rigid lenses in a normal bifocal design with the distance central give excellent results.

The lenses work on simultaneous vision however most rigid lenses will tend to translate up when the patient looks down to read and this brings up the reading section of the lens. The distance optic is able to be increased slightly giving improved clarity for the distance without affecting the reading.

An existing rigid lens patient who is becoming presbyopic is easily fitted and usually does not require a change in the basic fitting.

FITTING

For new patients the base curve and diameter selection is normal both for spherical and toric designs. If the patient is an existing rigid lens wearer, check to see if the lenses translate up when the patient looks down to read. If the lenses ride high the fitting needs to be changed to improve the centration, usually by increasing the diameter. The distance power should not be over-minus.

The design requires a well-centered lens with normal to slightly loose in movement as this helps the lens translate up when the patient looks down.

DESIGN

Good translation = Distance centre Bifocal.

No or poor translation = Rigid Multifocal (See separate Info sheet)

ADD

The Add requires an extra +0.25 from the Spec Rx.

SEG SIZE

The standard Seg size is 3.5 to 3.7mm diam. For normal pupils use 3.5 Seg and large pupils use 3.7Seg. If the lens centers well in normal gaze while still translating up when reading then 3.5 to 3.9 Segs can be used giving better clarity to the distance vision.

ADAPTATION

While some patients will adapt to this type of vision quickly most may experience some shadows or "3D" effects. The patient should be given enough time for these effects to reduce (5 days). A small percentage of patients may take even longer to fully adapt.

SIMULTANEOUS VISION

Some patients will not be able to adapt to Simultaneous vision even given extra time to adapt. If they are not able to read or the distance image is a blur and any over refraction is the same as the add or Rx then the patient is just suppressing one of the images and it is not worth trying different segs and power combinations.

However if the lens is translating well or the translation can be increased than the patient will be successful even though it is not truly simultaneous vision.

The fit should be normal with good centration in forward gaze. Poor centration will result in an uneven balance between the distance and the near image and unstable vision. Larger diameters usually improve centration. The vision with this type of lens can not be expected to give perfect clarity as there are a two images being produced at the same time resulting in reduced definition overall.

PROBLEM SOLVING

After checking the fit is correct an over refraction for both distance and near is done.

The power of the lens should be the same as a normal lens so any over refraction should only be a small fine tune, if the over refraction is the same as the add or Rx then the patient is just suppressing one of the images and it is not worth trying different segs and power combinations. To improve the clarity of the distance vision the seg size can be increased by a small amount (0.2mm) but this may reduce the near vision.

If the patient can not read and the lens appears to be translating well then the patient may not be suitable with this type of lens. Problems with distance clarity are more common than reading and this is the usual compromise with all simultaneous vision lenses.

