



Troubleshooting at Follow-up Visit

Lens Movement

- If the lens does not move after it has settled, verify tear exchange by instilling fluorescein in the cul-de-sac. Vertical movement in the UltraHealth lens is not necessary at the follow up visit due to the active tear pump created by the design of the hybrid lens.
- If the lens moves too much, this is a sign that the skirt may be too flat, or on occasion the vault too deep. This will most likely be uncomfortable and the patient will feel the excessive movement.

Impression Ring

- An impression ring is not uncommon at the follow up visit. As long as there is no sign of epithelial disruption or other negative symptoms, the ring is acceptable.
- If there is an impression ring with epithelial disruption, then re-evaluate the fit of the skirt. If the skirt is too steep, then the lens may be dropping down on the cornea after a few hours of wear.

Vision Issues

- Vision is usually not an issue and can be addressed by an over-refraction and a subsequent change in power.
- Check for residual astigmatism. Conduct an over-refraction and k-readings over the lenses to confirm whether the residual astigmatism is due to lenticular cylinder or lens flexure. The UltraHealth lens does not correct for lenticular astigmatism. Lens flexure may be caused by the location of the corneal irregularity in relation to the skirt.

Check for Bubbles with Blue Light



Bubbles

- A bubble under the lens may cause discomfort and distorted vision. Confirm that the patient is filling the bowl of the lens completely with saline prior to insertion and that his/her head is down and parallel with the table top. Try to have the patient avoid pushing the lens onto the eye or rubbing the eye after insertion.
- If you see bubbles being sucked under the lens, this is indicative of a skirt that is too flat. Insert a lens with the same vault and a steeper skirt and confirm that the issue goes away. Sometimes if the landing area of the skirt is uneven, due to a corneal irregularity, this may result in part of the skirt lifting up and bubbles being pumped under the lens.



Comfort

- The most common issue at the follow up visit is lens discomfort which may be indicative of a tight lens or a lens that is bearing on the cornea. If patient complains that wear time is decreasing, then it may be a symptom of a lens that needs an adjustment.

Symptom	Possible Cause	Solution
Initial Lens Awareness	Lens awareness may occur when the patient initially starts to wear the lens, especially patients that are coming out of a lens that has very little movement.	This awareness should go away and wear time should increase by the follow up visit.
Central Lens Awareness or Peripheral Lens Awareness	Central lens awareness may be caused by apical touch of the GP. Peripheral lens awareness may be an awareness of the skirt.	Determine if the lens awareness is central or at the periphery. If lens awareness is central, confirm that there is apical clearance and adjust vault if necessary. If lens awareness is in the periphery, a skirt change may be necessary.
Increased discomfort and gradual decrease in wear time	Discomfort may result from apical touch that wasn't initially present due to rebounding of the cornea from previous lens.	Reinsert lens with fluorescein and reconfirm apical touch. At initial fit the lens should be approximately 100 μ above apical touch. Ideally, after the lens has settled there should be approximately 50-60 μ of clearance over the apex.
Increased discomfort and gradual decrease in wear time	Discomfort may result if the skirt is too steep. If the skirt is fit too steep, the lens may tighten up after the skirt settles down. If the skirt is too steep (no visible inner landing zone), the weight of the lens is no longer resting on the outer landing zone. The lens may initially feel fine, but after wear, skirt will drop and seal off the GP portion of the lens.	Flatten skirt to engage the outer landing zone on the skirt.
Discomfort with occasional "glare"	GP has too much vault	Re-confirm apical touch using a flat skirt. When a small amount of apical touch is observed (feather touch) increase the vault by 50 μ . If a larger amount of central touch is observed (heavy bearing), increase the vault by 100 μ .
Discomfort upon insertion or within a few hours. Lens may feel "tight"; patient experiences photophobia.	GP Bearing or ILZ bearing of skirt	Reinsert the lens with fluorescein and evaluate pattern. If you see central bearing increase vault. If light central bearing increase vault 50 μ . If heavy bearing increase vault 100 μ . If there is no central bearing, evaluate the pattern of the skirt. Check to see if there is bearing in the ILZ. If so, steepen the skirt. If you are sure that the lens is vaulted properly and the steeper skirt curve does not provide a thinning of fluorescein in the ILZ then you may have to change to a different lens design. Call your Irregular Cornea Specialist or Consultation.