PRK/Surface Ablation Post-Procedure Doctor Guidelines

PRK POST-PROCEDURE GUIDELINES

Antibiotic Drops	Ocuflox Ofloxacin	1 gtts in the surgical eye(s) QID the day before, and the morning of the procedure. Continue 1 gtts in the surgical eye(s) QID x 7 days OR until epithelium has healed. *** If epithelium not healed by day 5 contact TLC.*
Anti-Inflammatory Drops *Shake Well Before Using*	Pred Forte/Prednisolone or Durezol	After surgery, 1 gtts QID until bottle is gone. or After surgery, 1 gtt BID until bottle is gone.
Non steroidal	Prolensa	1 gtts every day until bottle is gone.
Lubrication Drops	Systane or Refresh brands	1 gtts OU 4x per day or as needed.

If the patient's refraction is not stable, consider manipulation of the refractive error using the steroid. If the patient is too myopic, consider increasing the steroid by 1 drop for 2 weeks then starting to taper again. If the patient is too hyperopic and significant haze is not present, consider decreasing the steroid and tapering the patient sooner. The post surface ablation patient should not be on steroid more than 6 months and IOP should be monitored.

POST-PROCEDURE PATIENT INFORMATION REQUIRED

During Epithelial Healing:

- Epithelial Healing Progress until 100% filled in
- Corneal Assessment; edema / infiltrates / infection
- CL fit
- Medication Regimen

After Epithelial Healing:

- Uncorrected visual acuity
- Best corrected visual acuity
- Refraction (Cycloplegic at 12 months)
- Intraocular Pressure (Applanation Tonometry)
- Medication Regimen

SPECIFIC INSTRUCTIONS

Special care for the first 3-5 days is especially important for patients while the epithelial layer is healing. Patient instructions include: no exercise, strenuous activity, eye makeup or swimming for at least one week. Patients should also avoid dusty/dirty environments x4 days. Showers are permitted 24 hours after the procedure but eyes must be kept closed. TV and other visual activities are permitted if comfortable for the patient. Driving and work may resume when vision allows.

Visual quality usually improves gradually with increased night glare observed initially. Vision fluctuation is also common. Patients will be extremely blurry for at least the first 3 to 5 days while the epithelium is healing. Vision should start to clear around Week 1 and improve considerably by Week 3-4.

Temporary glasses or disposable contacts, if needed, may be fitted after 1 week but usually are not needed for 1-2 months. For the CL tolerant patient, disposable contacts are the most economical option as the prescription may change as healing proceeds. Prescription is often disproportionately high in relation to uncorrected vision. Example: 20/40 uncorrected vision may have -2.00D refraction. Enhancement is performed for -1.00D and greater only (i.e. according to UCVA) but disposable contacts may require more power.

Enhancements are performed after 6 months minimum and only when the refractive error is stable. So that benefits of the procedure outweigh the risks, ideal criteria for enhancement are UCVA 20/40 or worse and refractive error of $\geq$ -1.00D. Reconsider Monovision as an option for the myopic post op patient. Risk of haze for enhancements is the same as for the initial procedure, about 1%, but higher if original Rx was severe or the patient developed haze after their primary procedure. Recurrent haze may be treated with PRK/PTK when necessary.

REQUIRED EXAMINATIONS

Day 1, 2, 3+ UNTIL THE EPITHELIUM IS 100% HEALED:

Patient has been fit with a snug bandage contact lens post-operatively. Do not stain or remove the contact lens to examine the eye. Monitor the progress of their epithelial healing. Assess the eye(s) daily to rule out infection, corneal infiltrates and tight contact lens syndrome.

Epithelial healing: Note the initial debridement zone is approximately 7 mm diameter for Myopia. Average healing expectations: Day 1: 30-60%; Day 2: 60-90%; Day 3-5: 100% healed. If the patient has not healed by day 5, please contact the surgeon. Every patient heals differently, some may take longer. If no complications occur, the bandage contact lens should be left on the eye and removed on Day 4 when epithelial healing is complete. Please see below for removal of the BCL and/or extending the CL wear.

As the edges of the epithelium merge in the final stages of healing, a central branched pattern or a small area of irregular epithelium may be noted. This is a normal finding. If the epithelium is very irregular following CL removal, patch with antibiotic ointment for 6-12 hours or apply a new Bandage Contact Lens.

Tight contact lens: Evidenced by corneal edema (folds in Descemet's membrane) requires CL removal and patching with antibiotic ointment.
Corneal Infiltrate: Requires removal of CL and call to TLC immediately for instructions.
Corneal Infection: If ulcer or other corneal infection occurs, refer to TLC Center for culture/Fortified Antibiotics immediately.
Delayed epithelial healing: If epithelial healing is not complete at 72 hours and:

-Eye is quiet: Continue BCL for additional 24 hours. Continue Antibiotic QID. The Non Steroidal Anti-Inflammatory is only used for 72 hours as it can delay healing.

-Eye is inflamed, or healing is incomplete at Day 4: Remove BCL and patch with antibiotic ointment and evaluate daily until healed.

-Eye is quiet with incomplete healing: BCL can be replaced and monitored in 1 day

Removal of Bandage CL: To remove the BCL, copious amounts of topical lubricant should be used to literally float the lens and facilitate removal while maintaining patient comfort and cooperation. After BCL removal, patients may experience irritation and blurred vision for an additional 1-2 days until the epithelium smoothes. Artificial tears should be used for symptomatic relief. Comfort and vision will improve gradually as the epithelial layer becomes increasingly regular.

WEEK 2:

Overcorrection (approximately ±1.00D depending on the patient's age and pre-operative refractive error) is ideal to allow for regression. BCVA may be reduced initially but usually resolves with time. Reassure the patient and monitor. Please see page 1 for manipulation of the refractive error with the steroid. Applanation tonometry is imperative to rule out steroid response. If IOP spike is present (IOP >21 mm Hg, or 8 mm Hg rise in IOP) add topical beta-blocker if there are no contraindications (asthma, cardiac problems). If elevated IOP persists, consider adding topical carbonic anhydrase inhibitor provided there are no contraindications (sulfa allergy, etc). Steroid dosage should be maintained as per standard protocol if IOP is under control; otherwise taper steroid more quickly. Contact TLC for instructions. IOP will measure less, due to corneal flattening after refractive procedures; underestimated by 2/3 of pre-op Rx i.e. -6.00 would estimate 4 mm reduction in IOP reading causing false lower IOP findings. This should be kept in mind when measuring and assessing IOP by Applanation.

MONTH 1, 2, 3 & 4:

- Monitor UCVA, refraction and BCVA, IOP and corneal clarity.
- Diffuse reticular haze is a normal part of healing with an average onset at 2 weeks, peak at 3 months, clears after 6 months.
- Irregular or induced astigmatism and glare, if present, generally improve over time.
- Enhancements are not performed until 6 months post-op in order to allow for healing to stabilize.
- If needed, patients may be fitted temporarily with glasses or contacts (trial disposable lenses may be most economical as Rx is still changing). For Presbyopes, OTC readers may suffice until the Rx is stable.

MONTH 6 and MONTH 12:

Enhancements may be performed if: UCVA is equal to, or worse than, 20/40 and Rx is > +/- 1.00D, or patients has significant asthenopia. Patients must be off steroids for a minimum of 2 months and refractive error should be stable. Best corrected visual acuity is usually restored by 1 year.

PRK/SURFACE ABLATION INDICATIONS

- Equal to or less than 2.00D of cylinder correction
- Low to moderate myopia -1.00 to -4.00D
- Excellent procedure if myopia < -3.00D
- Higher myopic Rx in an informed patient who is not a candidate for LASIK

CONTRAINDICATIONS

- Clinical Keratoconus
- Significant or Progressive Cataracts
- Glaucoma (Visual Field Loss)
- Active Autoimmune Disease
- Herpes Simplex Keratitis
- Herpes Zoster Ophthalmicus
- Monocular Patients (one eye <20/40)

PROCEDURE FACTS

- Procedure takes 3-5 minutes
- Risk of severe haze with mild or moderate Myopia is 1%, with severe Myopia 2-5%
- 1/10 patients experience severe pain during epithelial healing
- Loss of best corrected vision of 2 lines in 1% of patients unless they have a severe prescription