

Seeing Eye to Eye: Enhancing Care Collaboration between Ophthalmology and Optometry for Specialty Contact Lens Patients with Ocular Disease

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Outline

1. Goals of Co-management of ocular disease patients wearing specialty contact lenses
 - a. Monitor specialty contact lens fit for any adverse effects on ocular surface or condition
 - b. Closely monitor the underlying ocular condition for changes
 - c. Routinely perform diagnostic testing relevant to the patient's condition
 - d. Proper patient education on symptoms to monitor
 - e. Consistent communication with the patient's referring ophthalmologist
 - f. Provide patient with best visual acuity potential and contact lens for management of their condition
2. Keratoconus and Corneal Ectasia
 - a. Specialty Lens Fitting Approach
 - i. Keratoconus and Corneal Ectasia
 1. Specialty contact lens options
 2. Advanced vision correction options
 - a. HOA and customized optics
 - ii. Ectasia patients with Intracorneal ring segments
 1. Avoiding any contact lens with mechanical touch
 - iii. Post corneal crosslinking (CXL) ectasia patients
 1. Address any changes in fit required
 2. Communicate with corneal specialist their preference on when to resume lens wear
 - b. Key Findings to monitor
 - i. Development of scarring
 - ii. Development of hydrops
 - iii. Progression on topography
 - c. Diagnostic testing to perform
 - i. Topography – monitoring for progression
 - ii. External photos – monitoring for scarring, neovascularization
 - d. Follow up cadence
 - e. Items to communicate to corneal specialist

- i. After specialty contact lens evaluation: communicate lens choice/design, BCVA, subjective response of patient, follow up plan
 - ii. Once fit of specialty lens finalized
 - iii. If any significant changes on topography noted
 - iv. If best corrected vision is not satisfactory to patient
 - v. If patient unable to tolerate lens, handle, apply/remove lens
 - vi. If patient develops hydrops
- 3. Corneal Transplants
 - a. PK/DALK
 - i. Specialty Lens Fitting approach
 - 1. Specialty contact lens options
 - 2. High Dk
 - 3. Avoid mechanical touch over sutures
 - 4. Avoid suction
 - ii. Key findings to monitor
 - 1. Clarity of graft
 - 2. Signs of rejection or graft failure
 - 3. Suture integrity
 - 4. Signs of graft dehiscence
 - b. Endothelial transplants
 - i. Specialty Lens Fitting approach
 - 1. High Dk
 - 2. Avoid suction
 - ii. Key findings to monitor
 - 1. Signs of edema
 - 2. Signs of graft dislocation
 - 3. Signs of rejection or graft failure
 - c. Keratoprosthesis (KPro)
 - i. Specialty contact lens approach
 - 1. Coverage of entire device
 - 2. Stability of lens on ocular surface
 - ii. Key findings to monitor – desiccation, epithelial breakdown, dellen formation, corneal melt
 - d. Diagnostic testing to perform with corneal transplant
 - i. IOP at every visit
 - ii. Endothelial cell count – if able
 - iii. External photos of contact lens fit and ocular surface without lens in place
 - iv. Topography to monitor pachymetry map for edema
 - e. Follow up cadence for corneal transplants
 - i. Dependent on age and health of graft
 - 1. More frequent monitoring on older/compromised grafts, stage of underlying condition
 - f. Items to communicate with corneal specialist
 - i. After specialty contact lens evaluation – communicate lens design, BCVA, subjective response of patient
 - ii. Once fit of specialty lens finalized and follow up plan going forward

- iii. Any signs of graft changes, edema, cell loss, rejection, failure, eye pressure elevation, compliance with prescription drops
 - iv. If patient unable to tolerate lens, handle, apply/remove lens
- 4. Glaucoma Patients
 - a. Trabeculectomy/Bleb and Tube Shunt patients
 - i. Specialty Lens Fitting approach
 - 1. Specialty contact lens options
 - 2. Avoiding mechanical pressure over conjunctival tissue/glaucoma surgical site
 - ii. Key findings to monitor
 - 1. Changes in conjunctival appearance – inflammation, erosion, infection, positive seidel
 - iii. Diagnostic testing to perform
 - 1. External photos – integrity of conjunctival tissue, conjunctival photos with contact lens in place and without
 - 2. IOP every visit
 - 3. Anterior segment OCT over tube with scleral lens wear
 - iv. Follow up cadence
 - 1. Base on stability of glaucoma surgery site and underlying condition
 - v. Items to communicate with glaucoma specialist
 - 1. After diagnostic fitting – communicate lens choice, BCVA, subjective response of patient
 - 2. Once fit of specialty contact lens finalized and follow up going forward
 - 3. If patient is non-compliant with drop schedule, noting any sensitivities to drops
 - 4. Any reduction in BCVA or change in patient's subjective visual field
 - 5. If patient planning for additional glaucoma procedures, discuss options for surgical approach if patient wearing scleral contact lens
 - 6. If patient unable to tolerate lens, handle, apply/remove lens
- 5. Ocular Surface Disease
 - a. Specialty Contact Lens Fitting Approach
 - i. Scleral contact lens applications
 - ii. Specialty soft contact lens applications
 - b. Conditions with rapid fire examples
 - i. Limbal Stem Cell Deficiency (LSCD)
 - 1. Key findings to monitor -Changes in ocular surface: corneal haze, neovascularization, conjunctivalization, epithelial defects, infection
 - 2. Additional considerations with LSCD transplants
 - ii. Chronic Graft Versus Host Disease (GVHD)
 - 1. Key findings to monitor -cicatrical scarring, epithelial breakdown, corneal thinning, neovascularization, lid anatomy changes
 - iii. Keratoconjunctivitis Sicca
 - 1. Key findings to monitor - changes in ocular surface desiccation, corneal thinning, corneal scarring
 - iv. Neurotrophic Keratitis
 - 1. Key findings to monitor - epithelial defects and persistent defects, epithelial thinning, infection, perforation
 - v. Stevens-Johnson Syndrome (SJS)

1. Key findings to monitor - change in fornix or conjunctival appearance, keratinization, corneal thinning, dellen
- c. Diagnostic testing to perform
 - i. serial photos of contact lens fit and ocular surface without contact lens in place
 - ii. IOP – especially in patients taking ocular or oral steroids
 - iii. Topography to monitor irregularity of corneal surface
- d. Follow up cadence for ocular surface disease patients
 - i. Dependent on the stability of ocular surface and staging of condition
 - ii. Examples
- e. Items to communicate with corneal specialist
 - i. After diagnostic fitting – communicate lens choice, BCVA, subjective response of patient
 - ii. Once fit of specialty contact lens finalized and follow up plan going forward
 - iii. Any worsening of ocular signs, symptoms, or disease progression
 - iv. If patient unable to tolerate lens, handle, apply/remove lens
- f. Communicate findings with patient’s care team as well
 - i. GVHD – oncology
 - ii. Keratoconjunctivitis Sicca – rheumatology if caused by an underlying autoimmune condition
6. Trauma /Retina patients
 - a. Specialty Contact Lens Fitting approach
 - b. Specialty contact lens options
 - c. Conditions with rapid fire examples
 - i. Aphakia
 - ii. Ruptured Globe
 - iii. Silicone Oil
 - iv. Scleral Buckle
 - v. Traumatic mydriasis
 - d. Diagnostic testing to perform
 - i. serial photos of contact lens fit and ocular surface without contact lens in place
 - ii. IOP – especially in patients taking ocular or oral steroids
 - iii. Topography to assess any concurrent irregularity of corneal surface
 - e. Follow up cadence for retina patients wearing specialty contact lenses
 - f. Items to communicate with retina specialist
 - i. After diagnostic fitting – communicate lens choice, BCVA, subjective response of patient
 - ii. Once fit of specialty contact lens finalized and follow up plan going forward
 - iii. Any significant elevation in eye pressure, compliance with prescription drops
 - iv. If patient unable to tolerate lens, handle, apply/remove lens
7. Communication for upcoming procedures of current specialty contact lens wearers
 - a. Discussion between providers if patient is planning upcoming procedure
 - i. How this will impact current contact lens fit
 1. Will surgical procedure change contact lens modality patient will require
 2. Will surgical procedure require refit of contact lens or change in contact lens power
 - ii. How long patient required to stay out of contact lens
 1. Impact on underlying condition
 - a. Ocular surface disease patients will require resuming contact lens wear due to underlying surface issues and potential epithelial breakdown

- b. Corneal ectasia/irregular cornea patients will require resuming contact lens wear to improve vision to functional level
 - iii. Options for surgical procedure approach to improve specialty contact lens outcome
 - 8. Conclusions
 - 9. Audience questions