Management of Conjunctival Prolapse During Scleral Contact Lens Wear in an Ocular Cicatricial Pemphigoid Patient

Eric Kawulok OD1, Muriel Schornack OD, FAAO, FSLS2
Department of Ophthalmology
1Mayo Clinic, Scottsdale, AZ; 2Mayo Clinic, Rochester, MN

Purpose
Review of ocular cicatricial pemphigoid (OCP) and describe the use of a scleral lens in disease management.

Background
Ocular cicatricial pemphigoid (OCP)
- A subgroup of mucous membrane pemphigoid (MMP) which causes blistering of mucous membranes.1
- Approximately 80% of patients that have MMP develop ocular involvement.2
- Incidence of OCP is difficult to determine.5
- Chronic inflammation of the conjunctiva will lead to fibrosis and cause a decrease in density of goblet cells and destruction of lacrimal ductules.1
- Poor lid apposition from fornix shortening causes trichiasis and ultimately may lead to corneal ulceration.1

Current Management
- Restasis ophthalmic emulsion
- Autologous serum ophthalmic drops
- Oral doxycycline
- Oral CellCept
- Weekly trichiasis epilation
- Punctal occlusion
- Moisture chambers

Case Report

Case History
- 70-year-old Caucasian female with 6 year history of ocular cicatricial pemphigoid
- Chief concern of significant eye pain, light sensitivity and blurry vision
- Primary open angle glaucoma

Initial Management

Initial Scleral Contact Order/Fit
OD: Diameter/Power: 15.8/+4.75
Optic Zone: 8.5 Base Curve: 8.23
Limbal Curve (1/2): 7.94/6.96
Landing Zone (3/4): 12.75/14.60
OS: Diameter/Power: 14.8/+3.25
Optic Zone: 8.0 Base Curve: 7.85
Limbal Curve (1/2): 7.46/6.58
Landing Zone (3/4): 12.40/14.40
- Distance visual acuity: OD: 20/50; OS: 20/30
- Subjective evaluation: Left contact lens about 20-30 minutes into wear will develop discomfort, burning and foggy vision. Significant improvement in light sensitivity.
- Objective evaluation: OD: Appropriate central corneal and limbal clearance; no conjunctival vessel blanching.

Initial Visit

Initial Scleral Contact Order/Fit
OD: Diameter/Power: 15.8/+4.75
Optic Zone: 8.5 Base Curve: 8.23
Limbal Curve (1/2): 7.94/6.96
Landing Zone (3/4): 12.75/14.60
OS: Diameter/Power: 14.8/+3.25
Optic Zone: 8.0 Base Curve: 7.85
Limbal Curve (1/2): 7.46/6.58
Landing Zone (3/4): 12.40/14.40
- Distance visual acuity: OD: 20/50; OS: 20/30
- Subjective evaluation: Left contact lens about 20-30 minutes into wear will develop discomfort, burning and foggy vision. Significant improvement in light sensitivity.
- Objective evaluation: OD: Appropriate central corneal and limbal clearance; no conjunctival vessel blanching.

Final Lens Order/Follow Up
OS: Diameter/Power: 14.4/+3.37
Optic Zone: 7.4 Base Curve: 7.85
Limbal Curve (1/2/3): 7.46/6.58
Landing Zone (4/5): 13.00/14.50
- Distance visual acuity OD: 20/30; OS: 20/30
- Subjective evaluation: Both contact lenses are comfortable and improved light sensitivity.
- Objective evaluation: Both contact lenses had appropriate central corneal and limbal vault. The left contact lens showed an improvement in conjunctival prolapse.

Support

References

Discussion

• Scleral contact lenses provide a therapeutic barrier for OCP patient’s ocular surface improving ocular comfort.
• Follow up with detail on ocular surface integrity is important to minimize risk of contact lens wear complications.
• In the case presented, making the contact lens design smaller with adjustment in peripheral curvatures allowed for an improved fit and minimization of conjunctival prolapse.