

Made to Order: Custom Meds for the Cornea and Ocular Surface

Speaker: Cecelia Koetting, OD, FAAO, DipABO

Length: 1 hour

Description

Explore the evolving role of compounded medications in eyecare, from treating ocular surface disease to managing corneal ulcers, endophthalmitis or even myopia. This lecture covers clinical indications, regulatory considerations, formulation tips, and patient counseling strategies to help you integrate customized therapies into your practice confidently and compliantly.

Learning Objectives:

1. To inform practitioners on the clinical indications for compounded ophthalmic medications.
2. Discuss current applications of compounded therapies in managing ocular surface and anterior segment disease.
3. Discuss potential future uses and regulatory considerations of compounded medications in eyecare.

Course Outline:

1. Overview
 - a. Definition of compounded medications
 - b. Why compounding is useful and is needed
2. Indications for compounding
 - a. Limitations of commercially available options
 - b. OOP costs, copay, high deductible plans
 - c. Common ocular conditions requiring compounded therapy:
 - i. Ocular surface disease
 1. Cyclosporine
 2. Autologous serum
 3. Platelet rich plasma
 4. PF compounded steroids
 5. Testosterone
 6. Tacrolimus
 - ii. Corneal scarring
 1. Losartan
 - iii. Neurotrophic keratitis
 1. Insulin
 - iv. Ocular infections
 1. PHMB
 2. Fortified Tobramycin
 3. Vancomycin
 - v. Inflammatory conditions

1. non-commercial steroid combos
 - vi. Glaucoma
 1. preservative-free formulations
 2. combo drops
 - vii. Pain management / post-surgical care
 - viii. Myopia management
3. Clinical cases
 - a. Case 1: 16 YOA female acanthamoeba infection bilateral
 - i. Compounded antibiotics
 - ii. Compounded losartan
 1. Improved corneal scarring and vision
 - b. Case 2: 25 YOA male medical student with VKC
 - i. Compounded cyclosporine
 - ii. Compounded Tacrolimus
 - c. Case 3: 75 YOA male with severe allergies and sensitivity to preservatives
 - i. Compounded PF glaucoma medications
 - ii. Compounded PF dexamethasone
4. Compounding Methods & Formulations
 - a. Delivery systems: drops, gels, ointments, injections
 - b. Compounded vs. off-label vs. biologics
 - i. Examples:
 1. Autologous serum tears
 2. Tacrolimus eye drops
 3. Fortified vancomycin/gentamicin
 4. Hormonal or immunomodulatory drops
 - c. Storage, shelf-life, and administration tips
5. Safety, Legal & Regulatory Considerations
 - a. Understanding types of compounding pharmacies
 - i. **503A Pharmacies:** Traditional compounding pharmacies; patient-specific prescriptions; state-regulated.
 - ii. **503B Outsourcing Facilities:** FDA-registered; can produce in bulk; higher standards for sterility; ideal for in-office stock (e.g., fortified antibiotics, autologous serum).
 - b. Key Criteria When Selecting a Compounding Pharmacy
 - i. Specialization in ophthalmic formulations
 - ii. Sterility and compliance with USP <797> or <800> guidelines
 - iii. Transparency about ingredient sourcing and shelf life
 - iv. Ability to provide Certificates of Analysis (CoA)
 - v. Accessibility and shipping logistics for your patients
 - c. Tips for Locating a Trusted Compounding Pharmacy
 - d. Red Flags to Watch For
 - i. Inability to verify sterility protocols
 - ii. Lack of patient-specific labeling
 - iii. No clear documentation or questionable shelf life
6. Q&A / Discussion

