Everything You Wanted to Know About Therapeutics, But Were Afraid to Ask

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Better title-favorite therapeutic strategies

- Proper DX
- Proper staging
- Topical VS Systemic TX
- Adjunct therapy
- Proper drug selection
- Prognosis
- Patient counseling
- On-going patient assessment (The Herpes steroid provocative test)

Ester is NOT your Jewish aunt-
It’s a new approach to disease management

- It’s about time we had a better anesthetic than proparacaine

Proparacaine-A good anesthetic for the central cornea, but not much else.

Problems:
Efficacy
No limbal or conjunctival coverage

Name the best AMIDE anesthetic for LASIK, topical cataract surgery and lacrimal procedures.

- 1. Proparacaine
- 2. Tetracaine
- 3. Lidocaine
- 4. Cocaine
- 5. Benoxinate

- THINK AMIDES, NOT ESTERS

Topical Lidocaine is a BETTER anesthetic

- BENEFITS:
  - NO CROSS SENSITIVITY
  - EFFICACY ON VASCULAR TISSUE
  - NO LOCAL METABOLISM
  - LONGER LASTING
Available dosage forms
• 50cc bottle 4%-can be autoclaved
• 5cc 3.5% ophthalmic gel
• No preservatives

Epithelial defects-no problemo
• Better patching
• Bandage lenses
• Corneal micropuncture
• Doxycycline??
• Steroids??
• Vitamin C

Clinical Pearl#2: Don’t try to Patch Without It@@@@@
• Proper technique requires that the patient NOT be wrapped like a mummy with tape.
• Do not attach tape to nose, ears or glasses
• One touch technique
• Requires adhesive- Tincture of benzoin cmpd.

Corneal Erosion MANAGEMENT 2.0

FIRST: HEAL IT SECOND: KEEP IT HEALED THIRD: POKE IT WITH A SHARP STICK?

PAIN MGT OPTIONS: Oxycodone, The “BIG GUN”
• With ASA = Percodan
• With APAP = Percocett
• Schedule II drug = High abuse
• Better alternative with a schedule III drug
That all fine and good butttt:

- My Patients a drug abuser
- My Patient’s allergic to opiates
- I CAN’T prescribe Narcotic agents
- I don’t want to prescribe narcotic agents
- My patient doesn’t want to use dope
- @@@@@@@@@

Management of Dry Eye

- How do YOU spell D-R-Y E-Y-E
- Ocular surface disease is a serious business
- Chronic condition
- Multiple dry eye factors
- Mild to severe presentations

**Key(s) to managing dry eye?**

- 1. ASK and QUANTIFY (SX’s)
- DO YOU HAVE DRY EYE?
- HOW BAD IS IT?

**OCULAR SURFACE DISEASE INDEX (OSDI)**

3 question sets
- First set: Symptoms
- Second set: Function
- Third set: Environment

**OSDI Severity Grading**

![OSDI Severity Grading Table]

**OSDI Score**

Average = \[(\text{Sum of Score for All Questions Answered}) \times (25)]

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Key(s) to managing dry eye?

2. FIND THE CAUSE:

DRY EYE IS A COMPLEX DISEASE!

Drugs and Dry Eye
-A natural progression of disease-

Key(s) to managing dry eye?

2. OBJECTIVELY STAGE THE DISEASE (SIGNS)

Key(s) to managing dry eye?

3. SELECT THE PROPER TX

ACUTE VS CHRONIC
APPROPRIATE FOR TYPE
STEP THERAPY
The Sjogren's patient

- Starts with a bad cornea and serious aqueous deficiency
- Acute and chronic disease
- TX?

DRY EYE: THE NEW WAY

- Mucomimetic drop/bandage CL?
- OMEGA 3: DHA / EPA
- Anti-inflammatory: Steroid induction/Cyclosporin A/Xibrom?
- Punctal occlusion
- Evoxac (Sjogren's)

Evoxac: New and improved pilocarpine

- Parasympathomimetic
- Better tolerated
- 30mg TID
- No titration necessary—maybe
- NEVER in asthmatics

Evidence-based Management Strategies for Glaucoma Patients with Ocular Surface Disease (OSD)

THE DRY AND THE HIGH

CAN THEY COME IN THE SAME PACKAGE?

- GLAUCOMA
- OCULAR SURFACE DISEASE

GLC patient on phone: “Dr. My eyes feel like they are on fire”!!
OLD MYTH’S

• Blepharitis is curable
• Staph exotoxins produce the inflammation
• Ointments are the best TX
• SCRUB your troubles away
• Patient’s love complex expensive treatments
• All tetracyclines are the same
• There is no substitute for tetracycline

The Ideal Anti-infective

• Effective and selective
• Bacteriocidal
• Not destroyed by enzymes
• Rapid absorption
• No allergies
• Compatible with other drugs
• High therapeutic index
• Should not be toxic

DON’T TX KIDS LIKE LITTLE ADULTS: Pediatric conjunctivitis plays by different rules

Don’t treat pediatric conjunctivitis without first:
• Check history
• Check ears
• Check throat
• Check temperature

Moxeza/Zymaxid

• Just released-no change in active ingredient
• Zymaxid: Increased concentration
• Moxeza: Gel vehicle: BID for conjunctivitis only

IS THIS THE NEW FACE OF EBOLA?

Viral conjunctivitis is the #1 Cause of Acute INFECTIOUS Conjunctivitis
**Viral Pathogens**
- Adenoviral
- Herpes simplex
- Herpes zoster

**Adenoviral Signs**
- Follicular conjunctivitis - Variable most common in lower fornix
- Mild to moderate chemosis
- Lid swelling with mild ptosis
- Lymphadenopathy in 66%

**EKC SIGNS**
- Papillary response of upper tarsal conj.
- Subconj. Heme
- Pseudomembrane and conjunctival scarring-Severe form
- Subepithelial infiltrates-Severe form

**Is there a Cure for the Common Cold of the eye?**
- Spit and swish: Povidone 5% ophthalmic solution
- Don’t spare the steroids

**THE CURE?**
- Decrease infection from 18 to 7 days
- Fewer complications

**Currently in Animal Testing**
- **FORESIGHT PHARMACEUTICALS**
Topical FST100 Dexamethasone 0.1% Containing Povidone-Iodine 0.4% Reduced the Clinical Signs and Infectious Viral Titers in a Rabbit Model of Adenoviral Conjunctivitis

Herpes Simplex

- Primary disease
- Recurrent disease
  - Conjunctivitis
  - Keratitis
- Stromal disease
- Kerato-uveitis

Antiviral Agents

- IDU
- Vidarabine
- Trifluridine
- Ganciclovir
- Acyclovir
- Famcyclovir
- Valacyclovir

The Old: Trifluorothymidine
The New: Ganciclovir

- Was drug of choice for topical management of Herpes simplex ocular disease.
- Rapid absorption
- Toxicity occurs when used over 21 days
- Dosage: 5-8X daily
- Viroptic 1%-7.5cc-Burroughs

Herpes Zoster

- Commonly called “shingles”
- Lesions “HONOR” the mid-line
- Reoccurrence triggered by decreased immunity-MUST consider cause of reoccurrence

Who gets Post-herpetic Neuralgia @@@@@

- Immunocompromised folk
- The elderly
- Best treatment is prophylactic TX

Chronic neural pain-A different kind of animal
Neurontin: The New “Big Dog” for chronic pain

- Huge dosage range: 100-5000mg/d
- Must start slow
- Must give enough

Manage Potential Post-herpetic Neuralgia

- Oral acyclovir 800mg 5X daily
- Valacyclovir 1000mg TID
- Famcyclovir 500mg TID
- Low dose tricyclic antidepressant - amitryptiline 25mg/day
- Neurontin

Narcotics and Zoster pain

- OK for short term ACUTE H. zoster
- Not best for late phase post-zoster trigeminal neuralgia
- Vicodin = Tylenol + hydrocodone works well
- Many side-effects = constipation, drowsiness and nausea

THE END