

1 **The MUST HAVE Systemic Medications**

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2 **The MUST-HAVE Orals Meds**

- Augmentin
- Azithromycin
- Cephalosporin
- Doxycycline
- Famcyclovir
- Allegra
- Motrin (prescriptive strength)
- Vicodin
- Medrol dos-pak

3 **Augmentin**

Indications/Dosage forms

- **Indications:**
- Preseptal cellulitis
- Dacryocystitis
- Pediatric Hemophilus
- Amoxicillin + Clavulanate @ @ @ @
- **Dosage forms:**
- 500 or 875mg tablets BID
- 125 or 250mg/5cc pediatric suspension

4 **Augmentin**

Amoxacillin/Clavaulanate

- Broad spectrum penicillin (Staph, Strep, Hemophilus)
- Effective against penicillinase producers @ @ @
- High therapeutic index
- Bacteriocidal
- Low GI side-effects
- Safe in pregnancy
- Watch out for allergy

5 **“But Doctor, I’m Allergic to Penicillin”**

6 **15 Y/O female presents with mom-C/O red eye-Simple Right??**

- Has seen one nurse practitioner
- Has seen Two Optometrists
- Tx with Ciloxan
- Tx with Tobradex
- Mom wonders why nobody can cure her daughter

7 ***Azithromycin***

Indications/Dosage forms

- **Indications:**
- Drug of choice for Chlamydia
- Pediatric Hemophilus
- Penicillin substitute
- **Dosage forms:**
- 250mg Z-Pak (6 capsules)
- 1 gm packet
- 100 and 200mg/5ml ped. suspension

8 **The Second Generation Cephalosporins are Good for “HENPEK” Gram Negatives**

- **H: Hemophilus**
- **E: E. coli**
- **N: Neisseria**
- **P: Proteus**
- **E: Enterococci**
- **K: Klebsiella**

9 **What Causes Chronic Staph Lid Inflammation? Exotoxins Right??!**

10 **Staph epidemidis DOES NOT produce exotoxins, but it does produce a complex organic molecule:**

11 **Staph POO POO**

- Metabolize lipids to fatty acids
- Fatty acids = Staph Poopy
- Produce inflammatory response
- Don't use Steroids-a short term cure for a chronic disease.....

- Use.....

12 **Doxycycline**

Indications/Dosage forms

- **Indications:**
- **Back-up drug for Chlamydia**
- **Acne rosaceae/chronic Staph blepharitis**
- **Dosage forms:**
- **50 and 100mg tablets/capsules**
- **25mg/5ml suspension**

13 **For ALL Herpes It's the Drug of Choice**

- **Recurrent or resistant simplex**
- **ALL Zoster patients over 50@@@**

14 **Famvir**

Famcyclovir

- **Third generation anti-viral medication**
- **Pro-drug**
- **Selective toxicity**
- **Excellent anti-herpetic activity**
- **Expensive, but cost-effective**

15 **Famvir**

Indications/Dosage forms

- **Indications:**
- **Resistant ocular simplex or Type II simplex**
- **125-250mg BID**
- **Hepes zoster 500mg TID**
- **Dosage forms:**
- **125/250/500mg tablets**

16 ***“Doctor Onofrey, You changed my life”***

17 **Salagen**

Pilocarpine

- **Oral parasympathomimetic agent@@@**
- **Stimulates exocrine gland secretion**
- **Monitor for GI upset@@@**
- **Don't use in asthmatics**
- **Expensive**

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Salagen

Indications/Dosage forms

- **Indications:**
- **Advanced, non-responsive Sjogrens @ @ @ @**
- **5mg QID**
- **Dosage form:**
- **5mg tablets**

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Evoxac: New and improved pilocarpine

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

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Flaxseed Oil and OSD

- **A single 3 year study (200 patients) presented by CF Boerner at the American Society of Cataract and refractive surgery**
- **Report of 85% success of complete resolution of dry eye symptoms (burning and stinging)**
- **Marked decrease in artificial tear use**

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Flaxseed Oil and OSD

- **Improved CL tolerance**
- **Improved VDT tolerance**
- **Improved post-op Lasik comfort**
- **Improved meibomian oil “quality”-clearer and less viscosity-less meibomian stasis**
- **Improvement in Rosacea blepharitis**
- **No help in Sjogrens or drug induced dry eye**

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Flaxseed oil and OSD

- **Flaxseed oil composed of :**
Alpha-linoleic acid omega 3 (57%)
Linoleic acid omega 6 (15%)
Oleic acid omega 9 (18%)

23

Too much of a good thing?

- **Reduced platelet aggregation with:**
- **ASA**
- **Vitamin E**
- **Flaxseed oil**
- **Ginkgo**

- 24 **Allegra**
- Non-sedating anti-histamine
 - Good efficacy
 - Minimal drug interactions
 - No fatal interactions with erythromycin or ketaconazole (Seldane and Hismany) @ @ @ @
 - Dose can be titrated

- 25 **Allegra**
- Indications/Dosage forms**
- **Indications:**
 - Seasonal allergy not responsive to topical or nasal therapy
 - **Dosage forms:**
 - 60mg tablets-Adults BID
 - Kids: 30mg tabs BID
 - 180mg SR once daily for adults
 - Zyrtec and Claritin: Adult dose = Kids dose for 6 y/o and above @ @ @ @

- 26 ***ARE ORALS THE BEST WAY TO TREAT ALLERGY?***

- Do what allergists do
- Nasal sprays before orals
- Mast cell inhibitors or long acting steroids
- Safe
- Effective
- Synergistic with eye drops
- Safer than orals

- 27 **Vicodin**
- Hydrocodone/acetaminophen**

- Effective opiate analgesic agent
- Schedule III drug
- Good ratio of opiate to acetaminophen
- excellent synergism with ingredients
- Watch out for opiate (codeine) allergy
- Watch out for alcohol and drowsiness
- Constipation/GI upset

- 28 **Vicodin**
- Indications/dosage form**

- **Indications:**
- Moderate to severe pain
- Corneal injuries/burns

- Procedures:
- Cryo therapy/PRK/PTK/micropuncture
- Dosage forms:
- Fixed ratio of 5mg/500mg Hydrocodone/acetaminophen

29 **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

30 **Ibuprofen/Acetaminophen**
Indication/dosage forms

- Indications:
- Mild to severe pain
- Dosage forms
- 400-600mg motrin with 500-1000mg acetaminophen (Do not exceed 4 gms acetaminophen/day)
- No acetaminophen for persons that regularly consume daily alcohol

31 **NSAID Fact Sheet**

- Block cyclooxygenase@@@
- All NSAID's have equivalent efficacy in equal dosages and dose frequency@@@
ie 800mg motrin QID = 20mg of Feldene
- Allergic to one allergic to all
- Never give to diabetics

32 **New NSAIDS**

- New COX-2 inhibitors
- Only Vioxx for acute pain
- 50mg daily for 1 week max
- Celebrex is a sulfonamide@@@-Vioxx is NOT
- Fewer GI Side-effects@
@@@

33 **Scleritis is Serious Inflammation**
STEROID VS NSAID

34 **NSAIDS OF COURSE**
THEY'RE SAFER?

- Only anti-inflammatory in high doses
- Think RK good for -11.00 myope or LASIK
- GI ulceration

- Renal failure
- Congestive heart failure
- All diabetics/No No No
- POOR anti-inflammatory effect

35 **Steroids Are Safer?**

You must be kidding

- Extremely effective anti-inflammatory effect
- Safe for short term use if.....
- No GI ulcer
- No psychotic
- No high BP
- No diabetes

36 **Medrol Dospak**

Methyl prednisolone

- High potency oral corticosteroid
- Good anti-inflammatory activity (glucocorticoid)
- Low mineralocorticoid activity
- Convenient
- inexpensive
- Safe***

37 **Medrol Dose-pak**

Indications/dosage forms

- Indications:
- Anterior uveitis/scleritis/Type I allergy
- Dosage form:
- Pre-labeled with descending dosage (automatic daily taper over 6 days of TX)
- Always take with food/avoid in diabetics/GI bleeders/blood thinners/NSAIDS/hypertension/psychosis

38 **The 3 TOP REASONS FOR STEROIDS IN EYE DISEASE**

ARE:

1. TEMPORAL ARTERITIS
2. CRANIAL ARTERITIS
3. ARTERITIC ISCHEMIC OPTIC NEUROPATHY

No, you probably won't Tx it here, but you'd better not miss it
80-100mg prednisone daily

39 **Special dosing formulas for special patients**

- Age
- Weight
- Body Surface Area

40 **Young's Rule**

- Based on age
- Age (yrs)
Age + 12
- Example: 6 y/o gets acetaminophen q 4h. Adult dosage = 650mg q 4h
- 6
6 + 12

41 **Webster's Rule (Modified Young's)**

- Based on age (modified-Kids are fatter now)
- Age + 1 (yrs)
Age + 7
- Example:
- 6 + 1
6 + 7

42 **Clark's Rule**

- Based on weight
- More realistic and individualized
- Kids are larger today/greater obesity
- Wt (Lbs)
150
- Example: 50/60/70 lb 6 Y/O's/ acetaminophen at adult dose of 650mg q 4h
- 50/60/70
150

43 **BSA example**

- 3ft 3in tall child weighting 44 lbs has a BSA of:
- 39 in X 44 lbs
3131
- 100 cm X 20 kg

3600

- Quick BSA dose calculation =

Adult BSA = 1.73 sq M/adult dose acetaminophen = 650mg q 6h

- Child's dose = $\frac{0.74 \text{ sq. M}}{1.73 \text{ sq. M}}$

44 **Simple weight/dose calculations**

- PDR/package insert/facts and comparisons lists dose by weight
- Weight is almost always in Kg
- Dose is the full 24 hour dose
- Must know the frequency of dosing/D
- Must know the concentration of liquid dosage forms
- Must know the strengths of all solid dosage forms

45 **If the standard pediatric DAILY dosage of prednisolone is 1mg/kg in divided dosage**

Prescribe a standard dose for a 33 lb child to be administered TID

NOTE: PediaPred syrup contains 5mg/5ml prednisolone