Steroids

- How Steroids Work
  - Reduce inflammation
  - Constrict cutaneous capillaries, directly decreasing erythema
  - Decrease the mitotic rate of rapidly proliferating epidermis
  - Decrease fibroblast proliferation
Steroids

• Manage, not cure dermatologic disease
• May not “work” if:
  – They are not used for sufficient time
  – Candida superinfection
  – Bacterial superinfection
  – Contact dermatitis from the steroid develops

“Where” Matters: Steroid Absorption Varies by Location

• Steroids are absorbed at different rates on various parts of the body
  – 30% genitals
  – 30% eyelids
  – 7% face
  – 4% armpits
  – 1% forearms
  – 0.1% palms
  – 0.05% soles
Steroids for Vulvar Conditions

• Do not “work” if
  – They are not applied to the proper location
  – Use a large mirror to show her where to apply

Steroid Absorption Varies by Location On the Vulva

• Glabrous skin of clitoral hood, clitoris, interlabial folds, labia minora, vestibule and perineum are relatively steroid resistant: can use super-potent steroids here
• Hair-bearing skin of labia majora and the perianal region are very steroid sensitive: super-potent steroid use here may cause steroid induced erythema, irritation, or pain.
Steroid Potency

- Potency depends on
  - Vehicle
  - Steroid formula
  - Concentration of steroid
  - Frequency of application
  - Length of time used
Steroid Vehicles (Bases)

Ointment
Cream
Gel
Steroids

• Are ranked by class (I-VII) based on potency measured by a standardized vasoconstriction assay

Steroid Classes

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- Ointment
- Cream
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Steroid Vehicles (Bases)

Ointment
Cream
Gel
• Treat oral LP with topical 0.05% clobetasol gel (qhs to qid) or dexamethasone mouthwash (0.5 mg/5 ml: 1 tsp swish and spit QD/BID)

Topical Steroids: Standard Use

• For dermatoses use a superpotent steroid ointment (Class I) once or twice a day for one month, then daily for two months
• Maintain twice weekly for maintenance vs. decrease to a Class IV (and eventually a class V) topical steroid ointment (triamcinolone acetonide ointment 0.1% daily to twice daily)
Steroids: How much to use

• “Pea size”
Demonstrate how much and where to use; use photos and mirrors

Steroids: How Much to Prescribe

- 30 g = 1 ounce; tubes come as 15g, 30 g, 45 g
- Generally 15g to 30g = 3 mos supply
- Reapplication is not necessary after using toilet; if medication has been rubbed in well it is absorbed after 30 minutes
Complications of Topical Steroids

- Thin skin
- Telangiectasia
- After six weeks, rebound burning and irritation “steroid rosacea”
- Secondary infection with yeast, herpes, bacteria
- Systemic absorption (>60 g superpotent steroid per week) may result in adrenal suppression
- Rare allergic contact dermatitis
- Recurrent herpes infections
Lichen sclerosus, controlled but now with HSV
Oral Steroids

• Usually not necessary for most vulvar dermatologic problems
• Helpful 20-60 mg/d for severe conditions where topicals not desired or ineffective (severe contact dermatitis and ulcers)
  – Example of dosing: Prednisone 20 mg tabs
    • Take 40 mg po q am x 5 days, then 20 mg po q am x 10 days  Disp 20 tabs

Subcutaneous Steroid Injections

Intralesional Steroids

- Used for thickened, pruritic resistant dermatoses (lichen simplex chronicus, psoriasis, lichen sclerosus, lichen planus) and for localized or resistant ulcerative disease (Crohn’s, Behcet’s)
- Triamcinolone acetonide (Kenalog) 10 mg/ml
  - Dilute 1 ml triamcinolone (10 mg/ml) with 2 ml of normal saline
- Inject with 30 g needle into inflamed area
- Do not use more than 40 mg triamcinolone over entire vulva
- Gives relief in 24-48 hours; can be repeated every 3-4 weeks for up to 6 times
Intramuscular Steroids

- Used for thickened, pruritic resistant dermatoses (lichen simplex chronicus, psoriasis, lichen sclerosus, lichen planus)
- Triamcinolone acetonide intramuscular
- 1 mg/kg up to 80 mg IM
- This can be repeated monthly up to 3 total doses to get a severe condition under control
Topical Steroids: Intravaginal Use
Compounding Pharmacy

• Lichen planus
Do’s and Don'ts of Steroids

• If patient intolerant of commercially available products, work with your compounding pharmacy to find non-irritating bases: Intolerance of petrolatum is rare
• Safe application: finger cots vs. wash hands or wipe off hands after application
• Don’t touch or rub eyes after application
• Reduce doses/potency in children requiring long term use

Avoiding Adrenal Suppression

• Reduce dosing strength or frequency as soon as practical
• Consider all other steroid sources (concurrent treatments for asthma, otitis, dermatitis, poison ivy, arthritis, etc.)
Adrenal Suppression

• Symptoms: mild, subtle, non-specific
  – Weakness
  – Lethargy
  – Diarrhea
  – Fatigue

• Testing:
  – Early AM plasma total cortisol
    • > 20 = normal, < 3 = suppression

Steroids: Alternatives

• Pimecrolimus (Elidel) & Tacrolimus (Protopic)
  – Calcineurin inhibitors effective for dermatitis; may be effective for lichen sclerosus and lichen planus
  – Avoid steroid complications but carry a black box warning regarding tumor development
  – Not tolerated in many because of burning
  – Application regimen similar to steroids
The Corticosteroid and the Gynecologist

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