Peds Derm Updates
Now Even Updatier!

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Disclosures

- **Speaker**
  - Valeant
  - Bayer
  - Aqua
  - Promius
  - Amgen
  - Sanofi Regeneron

- **Advisory Board Representative**
  - Allergan
What’s New In Atopic Dermatitis?
Impact of Atopic Dermatitis

- Eczema causes stress, sleeplessness, discomfort and worry for the entire family
- Loss of sleep can decrease growth hormone secretion
- The parent of a child with eczema gets 1-1.5 hours less sleep a night on average
- Treating one patient with eczema is an example of “trickle down” healthcare
- Patients with eczema have increased risk of anxiety, ADHD (JAAD Oct 2016), injuries (likely due to distraction), and infections (Cutis June 2016)
Skin barrier is “broken”

Overactive immune system process

- Reaction to normal staph on skin?
  - Filaggrin defect allows staph to get in, attach, colonize which triggers the immune system reaction
  - 57% MSSA, 19% MRSA, 23% culture negative (DermNews May 2016)

- Result of a “bored” immune system?
Atopic Dermatitis: Standard Treatment

- Sensitive skin care
  - ALL free and clear detergent, no dryer sheets/fab soft
  - Dove sensitive skin or cetaphil soap
  - Vanicream/Vaseline/Aquaphor as moisturizers
  - Robathol bath oil
  - Bleach baths- ¼ cup bleach in full tub water
Dr Swanson’s Favorite Things

Sensitive Skin Care

ALL Free and Clear Laundry Detergent
No fabric softeners/dryer sheets
Dove Sensitive Skin or Cetaphil soap
Vanicream moisturizer- Walmart, Target, Costco, Sams (apply ON TOP of meds)
Vaseline or Aquaphor (apply ON TOP of any medicines)
Robathol bath oil
GermX Foaming Hand Sanitizer

Sunscreens

Neutrogena Sensitive Skin/Pure Baby
Banana Boat Kids Cream (not spray)
COTZ Total Block/ COTZ Face (tinted)**
Zinka “Colors” Sunscreen- various colors, fun for kids**
Elta MD Spray On Zinc based sunscreen- in office or online
Colore Science Pro Powder Sun Protection**
Heliocare pills

Face Care Products

SkinCeuticals Ultimate UV Defense SPF 30**
SkinCeuticals Sheer Physical UV Defense SPF 50**
Elta MD UV Clear- acne prone skin- tinted- in office or online
Gel/P M for nighttime
Olay Active Hydrating Cream**
Cetaphil Foaming Face Wash
Gel Foam Facial Cleanser
Olay Fresh Effects Shine Minimizing Cleanser**
Cetaphil non drying face cleansing wipes

Hats/Sun Protective Clothing
www.coolbar.com
www.walmar.com
www.oakley.com

Compression Stockings
www.brightlifeedirect.com- Allegro brand- 8-15 mm Hg

Keratosis Pilaris
Dove Gentle Exfoliating Wash
AmLactin 12% Cream
CeraVe SA

** order online
Atopic Dermatitis- Standard Treatment

- Topical steroids- always do OINTMENTS in little kids
  - HC 2.5
  - Triam 0.1
  - Fluocinonide 0.05
  - Clobetasol 0.05
- No need to “soak and smear”. Skin can be wet or dry (JAAD Aug 2016)
Topical steroid burst for severe eczema/significant flares
- Clobetasol bid for 4 days
- Fluocinonide bid for 10 days
- Triamcinolone bid until clear or followup appt
Calcineurin Inhibitors

- Elidel (pimecrolimus) 1% ointment
- Protopic (tacrolimus) 0.1% ointment
- Great for areas like face and folds
- Can be used as part of a maintenance routine
- Black Box Warning
- Pimecrolimus study from Pediatrics
  - 2418 patients age 3-12 mos old
  - Pts followed for 5-10 yrs
  - Found no evidence of lymphoma, malignancy or immune system impairment
  - Concluded it was safe even in the younger age group
NEW Treatments- Crisaborole

- Boron based topical ointment
- Inhibits phosphodiesterase-4 activity (PDE4) and decreases production of proinflammatory cytokines
- Several studies showing its efficacy down to age 2
- 65% of patients in preliminary studies were clear/almost clear
- Early and sustained improvement in pruritus
- Well tolerated; 4.4% of patients had stinging/burning
- Safety studies so far look great
- FDA approved in Dec 2016; NOW AVAILABLE!
NEW Treatments- Dupilumab!

- Blocks IL-4 and IL-13 (decreases the TH2 inflammatory response)
- 1 phase 2 study, 3 phase 3 studies show improvement in IGA and EASI scores
- Quality of life improves; itching decreases
- 300 mg subcut every other week (after 600 mg initial injection)
- Good side effect profile
  - Injection site reaction
  - Conjunctivitis
  - ?HSV
Dupilumab in Kids

- Studies are happening right now
- Small study presented at AAD 2017
  - 78 kids and adolescents; 38 age 6-11, 40 age 12-17
  - Used doses of either 2 mg/kg or 4 mg/kg every other week
  - Improved EASI and itch
  - Adverse effects- ”mild, transient, and unrelated”
Treatments on the Horizon

- **Nemolizumab** - IL 31 blocker
  - Phase 2 12 wk study - 260 pts - 60% improvement in pruritus
  - Qwk dosing

- **Lebrikizumab** - IL 13 blocker - also see increased HSV and conjunctivitis

- **Tralokinumab** - IL 13 blocker

- **Ustekinumab** - probably helpful for a subgroup of patients with AD
  - Small study in JAAD Jan 2017 - all pts showed gradual improvement with 50% reduction in EASI score by week 16
  - 45 mg at wk 0, wk 4, wk 12 and then every 8 wks
Atopic Dermatitis: Natural Therapy

- **Coconut oil**
  - Has good antibacterial properties, but doesn’t seem to help the eczema itself

- **Sunflower seed oil**
  - Does appear to help with eczema - difficult to find a good preparation
  - Aroma Workshop in Chicago
  - [hello@aromaworkshop.com](mailto:hello@aromaworkshop.com)
  - Patients can call 773-871-1985
  - 8 oz spray bottle for $22 plus $5.50 shipping
Atopic Dermatitis: Natural Therapy

- Olive oil makes things worse (DermTimes May 2016)
- Chilled Noczema can help decrease itch
- Hard water can worsen atopic dermatitis
  - Can recommend a water softener
  - Hardest water in US is upper plains and Rocky Mtn areas
Atopic Dermatitis: Prevention

- **Smoking**
  - Active and passive exposure to smoke associated with increased atopic dermatitis prevalence (JAAD Dec 2016)

- **Probiotics**
  - Taken by a child with eczema appear to have no impact
  - But if a pregnant woman takes probiotics 2 weeks prior to having a baby and for 3 mos after having the baby, it reduces the risk of eczema in that baby by 20-30%
Transepidermal Water Loss (TEWL)

- TEWL in first weeks of life associated with increased risk of eczema
- Families with h/o eczema should be managing their new baby with the same sensitive skin care strategies to try to prevent the eczema
- 50% reduction in eczema by simply using sensitive skin care in first weeks of life (JAMA Peds Online Dec 2016)
Genetic Variants of AD

- To include or not?
- JAMA Derm March 2017
- See pink book for details
- 842 kids from PEER registry
- All patients underwent genotyping for 4 most common FLG LOF mutations and TSLP SNP
JAAD Oct 2016 Systematic review and metaanalysis of persistence of AD
- Most childhood AD remits by adulthood
- Kids with persistent disease, later onset, and more severe disease had increased persistence of AD
- 1/5 kids had disease persistence beyond 8 yrs
Eczema and Peanut Allergy

- Early peanut exposure in severe eczema patients actually DECREASES the rate of peanut allergy (New Engl J Med)
- Consensus statement in SPD Jan/Feb 2016 showed an 11-25% reduction in risk of peanut allergy in high risk infants when peanuts were introduced between 4 and 11 mos of age
Pityriasis Alba

- Study compared topical steroids with topical calcineurin inhibitors for Pityriasis Alba
- Concluded that protopic/elidel work better than topical steroids (SPD Nov/Dec 2015)
- Could also consider treatment with calcipotriene or excimer laser
What’s New in Pediatric Allergic Contact Dermatitis?
Contact Dermatitis in Kids

- Either on the rise or being recognized more commonly
- 1 exposure to the triggering agent causes a rash for 3 weeks (patients cannot intermittently use their allergen)
Patch Testing Considerations in Kids

- **TRUE test is helpful in kids**
  - The causative agent was identified in 71% of kids with the TRUE test (SPD Meeting Summer 2016)
  - Use IQ chambers in kids less than 10 yrs old (Finn chambers have aluminum and vaccines do too so kids can be sensitized)

- Even though it can be helpful, it is not often pursued in children due to the inconvenience of it, cost of it, etc

- Most of the time, we try to identify the culprit based on the pattern of the rash
Wet Wipe Contact Dermatitis
Wet Wipe Contact Dermatitis

- Due to preservative MCI/MI (Kathon CG)
- Also think about it in cases of persistent facial dermatitis
- There are now 2 brands of wipes that don’t contain the allergen
  - Honest Brand
  - Earth’s Best Hypoallergenic
Nickel Contact Dermatitis
Nickel Contact Dermatitis

- Most common allergen
- Present in almost anything metal
  - Jewelry
  - Snaps on jeans
  - Belt buckles
- Strict avoidance is the only option
- [www.nonickel.com](http://www.nonickel.com)
- Dimethylglyoxime test
- Can trigger an id reaction
Id Reaction
An Id reaction is a sympathy rash to the primary problem.

Most commonly triggered by allergic contact dermatitis, but can be triggered by molluscum or tinea.
Gianotti Crosti

- Also causes monomorphous skin colored to pink papules all over arms, legs, and cheeks
- Check the ears
- More common in patients with h/o atopy
- Typically caused by EBV but several viruses can do it
- Can take up to 8 wks to resolve
- Topical steroids help if itchy
Gianotti Crosti - ear involvement
Shin Guard Dermatitis
Shin Guard Contact Dermatitis

- Can be irritant or allergic
- First step is to try the following steps:
  - Drysol (or OTC Certain Dri) applied to shins
  - Shin guard liners
  - Shin guards
  - Some suggest putting duct tape on shin guards as barrier
- Fluocinonide or clobetasol to treat
- Patch testing if initial plan doesn't work
Toilet Seat Dermatitis
Toilet Seat Dermatitis

- Either a reaction to a cleanser being used on the seat or to the components of the seat itself
- Characteristic distribution on the lateral buttocks and post thighs
- “Soft and Comfy” toilet seat covers- Amazon $5.99
- Treat with hydrocortisone or desonide
What’s New in Pediatric Psoriasis?
Pediatric Psoriasis

- Plaque psoriasis
- Guttate psoriasis - triggered by strep
  - Some pts have HLA-Cw6 homozygosity which is associated with strep assoc psoriasis and tonsillectomy is “curative” (JAAD Nov 2016)
- Inverse psoriasis - nearly always mistaken for yeast/tinea cruris in kids/teens
- Anti TNF induced psoriasis - most common on scalp
  - 1st- Infliximab, 2nd- Humira (SPD Meeting Summer 2016)
- Check the nails, check the tongue, check the belly button
  - 32% of kids have nail involvement and that is closely associated with psoriatic arthritis (SPD Jan/Feb 2017)
Psoriasis is a Systemic Disease

- #1 association in children is obesity
  - Talk to them about weight
- Ask kids about smoking and stress
- Consider checking blood pressure
- Still unclear if we should be screening for hypercholesterolemia or diabetes in kids with psoriasis, but they are associated
- Psoriasis is associated with avascular necrosis, esp in young adults, males and pts with PsA- consider it when localized pain in weight bearing joint (JAAD May 2017)
- Both PsO and PsA are associated with osteopenia, osteoporosis, osteomalacia, ankylosing spondylitis, and multiple types of fractures (JAAD June 2017)
Psoriasis Affects the Whole Family

- JAAD Feb 2017
- Dramatic impact of pediatric psoriasis on the parents
Pediatric Psoriasis - Topical Treatment

- Clobetasol cream/ointment - body
- Clobetasol foam (Olux/Olux E Foam) - scalp
- Taclonex suspension or Enstilar foam
- Elidel or Protopic - face and folds
- I personally don’t think calcipotriene alone or tazorac is that helpful
- Light therapy
Psoriasis

- Topical steroids continue to be the mainstay for pediatric psoriasis
- Systemic therapy options have been largely limited to cyclosporine, acitretin, methotrexate
- Biologic therapy is difficult because of lack of FDA approval, lack of data
- Systemic effects of psoriasis are making it more advantageous to consider systemic therapy, even in children
Biologics in Kids

- **Enbrel (etanercept)** - NOW APPROVED FOR KIDS >6 YRS OLD!!
  - Approved in Europe for psoriasis in kids >6 yrs old
  - Approved in US for JIA in kids >2 yrs old
  - 1 study in US in children- 2008- 211 patients age 4-17
    - 0.8 mg/kg/wk
    - 57% achieved PASI 75
    - This study has been continued to date and has great long term safety data (JAAD Feb 2016)
Biologics in Kids

- **Humira (adalimumab)** - CURRENTLY PURSUING PED PSOR INDICATION
  - Approved in US for kids with JIA (>2 yrs old) and Crohn’s (>6 yrs old)

- **Stelara (ustekinumab)**
  - Several case reports of effectiveness and safety
  - 1 clinical trial - patients age 12-18, 110 patients
    - 80% reached PASI 75 at 12 wks (JAAD Oct 2015)
  - Large study outside US is in progress
  - I have several pediatric patients on it
Biologics in Kids- Vaccines

- Live vaccines
  - Common ones
    - MMR (given at 12-15 mos and then again at 4-6 yrs)
    - Varicella (given at 12-18 mos and then again at 4-6 yrs)
    - Herpes Zoster
    - Intranasal Flu
  - Uncommon ones
    - Oral typhoid, yellow fever, oral polio, vaccinia/smallpox, BCG, rotavirus
- Double check that children are up to date on their vaccinations
Psoriasis - Alternative Treatments

- **Balneotherapy (Bath therapy)**
  - Dead Sea
  - Blue Lagoon in Iceland
  - 1 cup baking soda in bath Q week

- **Fish Oil**
  - Probably works as antiinflammatory
  - Small 28 pt study showed improvement
What’s New with Pediatric Rashes?
Perioral Dermatitis
Perioral Dermatitis in Kids

- Always ask about steroid use- topicals, inhalers, nasal sprays, etc
- Standard treatment
  - Elidel bid
  - Amoxicillin 30 mg/kg/day divided bid for a month
Perioral Dermatitis in Kids- Additional Treatment Options

- Tacrolimus 0.1% ointment
- Clindamycin lotion/wipes
- Metronidazole cream
- Sodium sulfacetamide products
- Aczone
- Gentamicin 0.3% ophthalmic ointment
- Oral Ivermectin/Soolantra (JAAD March 2017)
  - Small study- 8 pts with rosacea, 7 with POD received either single dose ivermectin 200-250 micrograms/kg or soolantra daily for 3 mos
  - 8/9 cleared with oral iver and 6/6 cleared with topical soolantra
- Longer antibiotics
- Azithromycin
  - I have classically prescribed it MWF for a month
  - Some providers are using it for 5-7 days, then 2 wks off, then repeat
- Make sure there are no steroids on the face
Diaper Rashes
Diaper Rashes

- Most common causes are irritant contact derm and yeast
- Symmetrical, moist appearing pinkness with satellite pustules suggests yeast
- Dermatitic like symmetrical rash that involves contact with soiled areas, frictional creases suggests irritant contact
- Regardless, I suggest zinc oxide barrier cream (Desitin) with each diaper change
- Pick one (go with your gut) and treat
  - Hydrocortisone 2.5% ointment bid
  - Econazole 1% cream bid
Diaper Rashes - Irritant Contact!
Diaper Rashes - Yeast!
Diaper Rashes - Yeast again!
Diaper Rashes

- Diaper rashes are less common in breastfed babies
- Buying “superabsorbent” diapers reduces the risk for diaper rashes
- Cloth diapers can cause diaper rashes that are more vesicular with bullae and erosions
- Interestingly, candida is more common in babies that are being treated with wet wipes
- SPD May/June 2016
Hand Foot and Mouth Disease

- Causes somewhat annular red-purple-gray patches on hands, feet, and around the mouth sometimes with intraoral lesions
- Previously coxsackie A16 and enterovirus 71 were the most common causes
- Coxsackie A6 has emerged over the past 2-3 yrs as the primary causative agent
- Produces more severe rash with prominent diaper area involvement
- Adults have been getting it
- Commonly produces onychomadesis 1-2 mos later (SPD July/Aug 2016)
Hand, Foot and Mouth Disease
HFMD and Onychomadesis
Tinea Capitis

- Systemic antifungal treatment for tinea capitis in kids: an abridged cochrane review (JAAD Feb 2017)
- Griseofulvin and Terbinafine are considered 1st line
- Griseo better for Microsporum, Terb better for Trichophyton
- Terbinafine daily x 4 wks, Griseo bid x 6-8 wks
- Griseofulvin: 20-25 mg/kg/day divided bid always with fatty food
- All side effects were mild and equivalent thru all meds (no specific comment on LFTs)
- Itraconazole and Fluconazole are alternatives (never use oral ketoconazole)
Pediatric Onychomycosis

- It happens!
  - (SPD Jan/Feb 2017- San Diego experience)
- Often there is family history
- Evaluate for tinea pedis
- Treat with terbinafine for 3 mos
  - <20 kg- 62.5 mg daily (1/4 pill)
  - 20-40 kg- 125 mg daily (1/2 pill)
  - >40 kg- 250 mg daily
- Itraconazole can be used in a pinch (comes in syrup)
- Liver function tests- to test or not to test
- Griseofulvin doesn’t work
Pediatric Onychomycosis
Lichen Sclerosus

- Probably doesn’t go away for most prepubertal girls
- Maintenance treatment is better than as needed treatment (SPD July/Aug 2015)

My regimen:
- Clobetasol ointment bid for 2 wks, then once daily for 2 wks, then followup
- Repeat that course if needed until clear
- Then clobetasol MWF once daily or elidel once daily for maintenance
- I see the girls every month until they are clear and then at minimum every 6 mos on maintenance
Since the chicken pox vaccine has been more regularly administered to children, cases of herpes zoster in children have been on the rise (Cutis Aug 2016)

We don’t know why immunity seems different with the vaccine vs having the chicken pox

- One theory- less varicella round in society allows immunity to wane and shingles gets a chance to blossom

Patient is contagious to people who have not had the chicken pox (can’t catch shingles from shingles)

- Need to avoid unimmunized kids and pregnant women

Treatment with Acyclovir 30-50 mg/kg/day divided TID (valtrex if old enough to take pills)
Pediatric Rashes- Herpes Zoster
Pigmented Fungiform Papillae of the Tongue

- Small brownish papules typically on dorsal and anterolateral surface of the tongue
- Kids and young adults in dark skin phenotypes
- Appear rare, but probably because of lack of reporting
- Completely benign and harmless
- SPD Meeting Summer 2016 and JAAD Feb 2017
HSP (Henoch Schoenlein Purpura)

- Predictors of renal involvement:
  - Scrotal involvement
  - GI symptoms
  - High D Dimer
  - Age > 4 yrs
Crohn’s Disease

- Penile and scrotal swelling is underrecognized presentation of crohn’s, esp in prepubertal and teenage kids
- Also can cause odd, persistent rashes on labia majora
- SPD Sept/Oct 2016 presented case report of anogenital swelling in a teenage girl as presenting sign of Crohn’s
- Biopsy shows granulomatous inflammation
Urticaria Pigmentosa
Urticaria Pigmentosa

- Lots of solitary mastocytomas
- Not scary, but looks scary and parents are often freaked out
- Most kids outgrow it
- No reason to check serum tryptase
- No risk of mast cell leukemia
- Manage with topical steroids prn
- Antihistamines +/-
Urticaria Pigmentosa

- Great article in SPD March/April 2017 summarizing UP in kids
- 26 kids
- Mean duration: 9-10 yrs
- Complete resolution in up to 56% of patients
- Majority probably don’t resolve before adolescence
- Resolution at less than 12 yrs old: male, younger at onset, fewer lesions
- Tryptase >20 can signal systemic involvement (1/26 had elevated tryptase and workup was normal)
- Epipens are unnecessary
  - 17/26 had general anesthesia and only 1 reported mild reaction
  - No reaction to Ibuprofen
  - 3 had bee stings- mild adverse reactions
Dangerous Mast Cell Issues

- Bullous Mastocytosis- presents as blistering in a newborn; ddx includes EB
- Diffuse Cutaneous Mastocytosis- the skin is diffusely infiltrated by mast cells so it becomes yellowish and rubbery diffusely
- Only these 2 mast cell issues in children carry risk of mast cell leukemia and require systemic workup and hem/onc involvement
Be Careful with your Mirvaso!

- JAMA Derm April 2017
- 4 yr old accidentally used mirvaso as toothpaste
- Rinsed and spit it out
- Ok at first
- 45 mins later developed bradycardia and somnolence requiring ambulance ride to ICU
- Symptoms lasted 12 hours
What’s New with Nevi?
Giant Congenital Nevi

- >20 satellite nevi increases chance for neurocutaneous melanosis (SPD Meeting Summer 2016)
- Number of satellites also increases risk of melanoma
- Risk of melanoma greatest in area overlying spinal cord
- New classification - 6 patterns (SPD March/April 2017)
  - Bolero - upper back including neck
  - Back - back but not buttocks or shoulders
  - Bathing trunk - some say this has highest risk
  - Breast/Belly
  - Body Extremities
  - Body - bolero + bathing trunk
What’s New with Acne?
Happening younger and younger
Used to be abnormal before age 9, now abnormal before age 7
Most acne medicines are technically approved for age 12 and up (epiduo approved age 9 and older)
Helpful to work through the mail order pharmacies in these situations
- GenRx- Prugen products
- YourRx- Allergan products
Mid Childhood Acne

- Acne in kids age 3-7
- Ask about inhaled steroid use- can be the cause
- Good idea to order labs and/or refer to peds endocrinology
  - Total/free testosterone
  - DHEA-S
  - LH/FSH
  - Bone age- plain film of left hand and left wrist
Food and Acne

- Skim milk appears to be associated with increased acne, but not other milk or dairy
- Diet with a high glycemic index (high carb, high sugar) appears to worsen acne
Changes in Isotretinoin Monitoring

- A number of studies have shown that we have been “over monitoring” with labs for isotretinoin.
- New recommendations are to check lipids and LFTs at baseline and then at 2 mos into therapy. If normal, that is all that is necessary.
- No need to check CBC.
Isotretinoin and Depression

- JAAD June 2017- Isotretinoin and depression- a systematic review and metaanalysis done in Taiwan
- Reviewed 31 studies
- DID NOT show an association
- Most kids had an improvement in their mood
During 2015 and 2016, I had 3 male patients and 1 female patient become severely depressed on accutane. None of them had h/o mood issues prior.

Appears to happen acutely

All 4 admitted that they felt the symptoms early on, but had lied to me about it because they saw the improvement the accutane was having with their skin

2 of them were cutting themselves unbeknownst to their friends and family

All 4 of them expressed suicidal ideation

1 of them was admitted to the hospital on a psych hold

1 of them attempted to commit suicide by jumping off a ladder head first

All 4 of them stopped the accutane and their mood returned to normal
Topical Acne Meds on the Horizon

- DRM01- topical sebum inhibitor - more on next slide
- FMX101- topical minocycline foam
  - 4%, applied once daily, studies in Israel
- SB204- topical nitric oxide releasing gel that works in antimicrobial and antiinflammatory ways (JCAD Aug 2016)
  - 1% and 4% strength being studied
  - BID dosing, appears effective and tolerable
- SEB002- topical to work with blue light. Delivers light absorbing gold-coated silica microparticles that are absorbed into the pilosebaceous unit and then enhance the PDT (Practical Derm Oct 2015)
Olumacostat Glasaretil (aka DRM01)
JAAD Jan 2017

- Topical sebum inhibitor
- Phase 2A study
- Also seems to reduce sebaceous gland size in animals
- Significant improvement in both inflammatory and noninflammatory lesions
- Well tolerated
Oral Contraceptive Pills

- Given desire to decrease oral antibiotic use, the use of OCPs has become more appealing
- My counseling routine
  - How to start the pill
  - Weight gain, nausea, mood issues
  - Blood clots, heart attack, stroke
  - Health benefits
  - Timeliness is important
OCPs

- Retrospective review of 2147 patients on OCPs for acne (JDD June 2016)
  - All OCPs help with acne
  - Triphasics probably help a little more than monophasics
  - Non estrogen component matters for efficacy:
    - Best- Drospirenone (Yaz, Yasmin)
    - 2nd Best- Norgestimate/desogestrel (ortho tri cyclen, ortho cyclen/ mircette, desogen)
    - 3rd Best- Norethindrone/levonorgestrel (loestrin, ortho novum/seasonale)
OCPs

- Typically want to try to avoid OCPs in girls less than 14 yrs old or girls that have had their period for less than 2 yrs
- Rifampin and Griseofulvin are the only antiinfectives that definitely decrease the efficacy of OCPs when preventing pregnancy
- Risk of clots is greatest when a patient is first starting the pill
Contraindications to OCPs (W.H.O.)

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<th>Contraindications</th>
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<td>Pregnancy</td>
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<td>Current breast cancer</td>
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<td>Breastfeeding &lt;6 wks postpartum</td>
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<td>Age &gt; 35 yrs and a heavy smoker</td>
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<td>HTN</td>
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<td>Diabetes with end organ damage</td>
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<td>Diabetes &gt; 20 yrs duration</td>
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<td>History of or current DVT/PE</td>
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<td>Major surgery with prolonged immobilization</td>
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<td>Ischemic heart disease or Valvular heart disease with complications</td>
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<td>History of CVA</td>
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<td>Headaches (migraine with focal neuro symptoms at any age or without aura if &gt;35 yrs old)</td>
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<td>Active viral hepatitis</td>
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<td>Severe decompensated cirrhosis</td>
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<td>Liver tumor (benign or malignant)</td>
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Other Hormone Tidbits

- Progesterone only methods of birth control tend to increase acne
  - Implanon
  - Mirena IUD
  - Progesterone mini pills

- Spironolactone can be helpful in the teenage population, especially if the patient has features of or a diagnosis of PCOS
What’s New with Hemangiomas?
Infantile Hemangiomas
Infantile Hemangiomas
Infantile Hemangiomas

- Propranolol is still great!
  - Suspension is 20 mg/5 ml
  - 2 mg/kg/day divided TID
    - If you are doing the math correctly, the dose ends up being around 1 ml TID for most babies
  - Always give with food
    - To prevent hypoglycemia
  - Don’t be afraid- if the hemangioma needs it, use it!
  - Typically used during growth period (1st 8-12 mos of life), but can work even beyond the proliferative phase (SPD May/June 2015)
Which Hemangiomas Need Propranolol?

- Large hemangiomas
- Ulcerating hemangiomas
- Hemangiomas in functional locations that will interfere with crawling, walking, etc
  - Knees, hands, elbows
- Special site hemangiomas
  - Eyelids, lips, parotid glands, genital area
  - Nasal hemangiomas have high rate of complication and early treatment is best (SPD Nov/Dec 2016)
- Dome shaped hemangiomas
  - Even when they involute, there is usually residual fibrofatty tissue
Infantile Hemangiomas

- Post Propranolol recurrences occur <25% of the time
  - Females
  - Deeper component of hemangioma
  - D/ced propranolol prior to 9 mos old (JAAD Oct 2016)
- Long term studies show no risk of developmental adverse effects or growth impairment at age 4 in pts treated with at least 6 mos of propranolol (JAAD July 2016)
- Topical timolol 0.5% gel forming solution can work for superficial hemangiomas- applied BID
Pyogenic Granuloma

- “Little ball of capillaries”
- Common in kids and pregnant women
- Some people remember trauma to the area prior to its growth
- 2 Treatment Options
  - Shave removal
  - Topical timolol bid
Pyogenic Granulommas

- Initial study in March/April 2014 SPD journal using timolol 0.5% gel forming solution BID
- Great results with clearance after 2-3 mos
- Bleeding stopped relatively instantly
- Likely working by vasoconstriction
- Important to followup these patients to ensure improvement (spitz nevi, even melanoma in ddx)
- How much to use?
  - Typically 1 drop is more than enough
  - Max 6-8 drops per day
Pyogenic Granuloma
Pyogenic Granuloma
What’s New in Genodermatoses?
Genodermatoses Potpourri

- NEMO gene (Incontinentia Pigmenti) is now called IKBKG
- PIK3CA - responsible for lymphatic malforms, vascular malformation with overgrowth syndromes (like klippel trenaunay and CLOVES)
- Icthyoses can be associated with vitamin D deficiency and can improve with supplementation
  - Consider checking vitamin D levels (SPD Meeting Summer 2016)
- Zorblisa is a new topical on the horizon for EB
  - 6% allantoin
  - Really helps with the wounds - 82% get wound closure by 2 mos (Derm News May 2016)
Fig 2. Modified algorithm for detecting risk of neurofibromatosis 1 (NF1) among individuals with isolated café-au-lait macules (CALMs) based on clinical parameters.
What’s New with Hyperhidrosis?
Hyperhidrosis Treatment Options

- Drysol or OTC Certain Dri at bedtime
- Oral robinul- 1 mg daily, then 1 mg bid
- Iontophoresis- good for hands/feet
  - Fischer MD1A is the best unit- $6-800
- Botox
- Miradry- just for armpits
- Carpe Lotion- OTC- applied once daily
  - 25% reduction in sweating
  - Have to use at least 4 wks, no adverse events
Hyperhidrosis - Other Options

- “Secure” Robinul (glycopyrrolate) 1% wipes
  - Available via an online Canadian pharmacy
  - DRM04- topical anticholinergic wipes being made by Dermira for daily use- on the horizon
- Oral oxybutynin
  - Start with 2.5 mg daily and increase by 2.5 mg daily at 2 wk intervals. Max 12.5 mg daily
- Topical botox- on the horizon
- Topical oxybutynin- on the horizon
More About Oxybutynin (Ditropan)

- **SPD Sept/Oct 2015- oxybutynin for palmoplantar hyperhidrosis**
  - 2.5 mg daily x 1 wk, then 2.5 mg bid x 2 wks, then 5 mg bid
  - Dry mouth
  - Available as 5 mg pills or 5 mg/5ml solution

- **SPD May/June 2016- Spain- kids/teens**
  - Oral robinul not available in Spain
  - 2.5 mg daily and increase by 2.5 mg daily at 2 wk intervals until results are seen
  - Contraindications: bladder/intestinal obstrxn, severe ulcerative colitis, glaucoma, myas gravis
  - No monitoring needed
  - Oropharyngeal xerosis is most common side effect
What’s New with Cooties?
Scabies

- In infants, it tends to present as a widespread “dirty” appearing rash with various morphologies - pink papules, urticarial papules, pustules, eczematous patches
  - Check palms and soles for pustules - very typical
- In older kids, presents more typically with increased involvement in webspaces and groin area
- If itch is out of proportion to the rash, consider scabies
Scabies
Scabies Treatment

- **Permethrin 5% cream**
  - Apply neck down tonight, wash off in am. Repeat in 1 wk
  - ALL family members have to do it simultaneously
  - Safe down to any age and safe in pregnant women

- **Ivermectin 0.2 mg/kg**
  - Take one dose today and another dose in 1 wk
  - I will use it if rash is extensive, affects face/scalp, or has failed permethrin

- **Precipitated Sulfur- 10% in white petrolatum at compounding pharm**
  - Apply bid for 3 days
  - Very stinky, but no resistance has been seen (Winter Clinical Jan 2016)
Scabies Treatment

- Wash all towels, clothes, sheets in hot water
- Vacuum carpet and upholstery
- Anything that can’t be washed should be placed in a closed plastic garbage bag and tied closed for 72 hrs
Post Scabietic Dermatitis

- Post scabietic dermatitis is very common
- Itchy, eczematous rash that waxes and wanes for up to 2-3 mos after the scabies has been treated
- Important to warn patients it will probably happen
- Schedule a followup visit
- Some of it can be a little bit psychological; important to examine and reassure
- Treat with topical steroids
Warts

- Countless treatment options
  - Liquid nitrogen
  - Cantharidin
  - OTCs
  - Candida
  - Squaric Acid (contact sensitizers)
  - Laser
  - Bleomycin

- Best Thing Ever- WartPeel!
  - Nucara Pharmacy- Iowa
  - Sal acid + 5FU
  - Magic in a bottle
  - Applied at bedtime under “sticky tape”
  - $89 and worth every penny!
To: Nu Cara Pharmacy 1-515-292-3645

PATIENT ____________________________

ADDRESS __________________________

ALERGIES __________________________

DATE _______ DOB _______

DAYTIME PHONE ______________________

VIA: Apply once daily following instruction sheet.

DISP: Squeeze

Refill: ______

SIGNATURE: _______________________

PRINTED NAME: ____________________

PHONE ___________________________

DEA: ______

CLINIC: ADVANCED DERMATOLOGY

Medication—Customized especially for you

Your practitioner has prescribed a specially compounded medication from:

NuCara Pharmacy
2700 Northridge Pkwy
Ankeny, IA 50023

Phone: (515) 292-3604
Fax: (515) 292-3605

Please call the number below to make arrangements to receive your medication:

1-515-292-3604

Between 9:00 am - 5:00 pm M-F

Thank you!

Please watch our instructional video at www.WartPud.com

WARTPud® (5% salicylic acid) is intended for use with the NuCara erythroplasia delivery system. This medication is custom compounded for you based on the prescription order of your physician. It is important to follow the instructions exactly. If you are pregnant or thinking of becoming pregnant, do not use this medication.

Description of this medication:

This medication contains salicylic acid and 5-fluorouracil in a proprietary base that is used to treat warts.

How to use this medication:

1. Apply medication at bedtime.
2. Apply very small amount of medication to a flat plastic applicator. Use the applicator to apply a thin layer directly onto the wart. The treatment area should be treated at least once a day. Apply the medication to the skin around the treated area with a clean rag.
3. Apply the medication to the skin around the treated area with a clean rag.
4. Keep the applicator dry and clean.
5. Wash hands after applying the medication.
6. Ease off the medication over several weeks.
7. In case of accidental ingestion or contact with eyes, nose, or mouth, contact NuCara Pharmacy or the local poison control center.

What to expect:

During the first few days of application, the skin around the wart may swell and become white. This will subside with continued applications.

Normal dosage:

The medication is applied once daily for a time determined by your physician.

Storage Requirements:

Store this medication at room temperature. Keep out of reach of children. Protect from light.

Expiration Date:

The medication is good for four months from the date made. Do not keep unused medication.

Side Effects:

 Rash and irritation, if medication is applied to good, healthy skin.

Caution and Warnings:

Only apply the medication to the wart. Do not apply to good skin. Keep away from children. Do not use on nose, eyes, or mouth.
WartPeel

Day 4 6/10/14

June 25
WartPeel
Mounting number of case reports showing that when pre-teens and teens are given HPV vaccine, their warts go away.

It will be interesting to see if we notice a decrease in incidence of warts over time as more and more people get immunized.
Molluscum Contagiosum

- Caused by a poxvirus
- Very common in kids—pretty much all kids get them
- Spread by direct contact and spread like crazy in water (including swimming pools)
- Treatment is not mandatory as they will go away with time
  - Can take up to 2 yrs to resolve on their own
  - Recent study of 170 kids—half treated, half not treated
    - Molluscum resolved in the same amount of time
Molluscum Treatment Options

- **Imiquimod/Zyclara**
  - Apply MWF at bedtime x 8 wks
  - A little irritation - good; a lot of irritation - bad
- **Zymaderm**
  - All natural OTC product, botanical based
  - Applied BID
- **Candida antigen injections**
  - Injected into 1-2 of the molluscum every 3 wks
  - Tolerable; typically 3-5 treatments
  - Side effect profile
  - Case report of halo nevi after 1 candida treatment (SPD March/April 2017)
- **Cantharidin**
  - Never use it in the axilla
  - Blisters can be bad
  - 50% resolution with each treatment is success
  - Hard to get these days
- **Curettage**
  - SPD Nov/Dec 2016- curettage for molluscum- applied EMLA prior-93% success after 1 treatment
- **Liquid Nitrogen

- **Topical retinoids**
Molluscum Dermatitis

- Some kids will get an eczema-like rash around the molluscum.
- Important to treat it as it itches so kids scratch and then spread the molluscum.
Pseudofurunculoid Molluscum

- Look like pimples/boils
- Due to body’s immune system response
- Not infected, just inflamed
- BOTE sign- Beginning Of The End
Pseudofurunculoid Molluscum
PF Molluscum and Id Reaction
PF Molluscum and Id Reaction

- Treat the Id Reaction with topical steroids
- Treat the PF molluscum with oral antibiotics or bleach baths
- F/u 2-3 wks
- Usually everything is “all better”
What’s New with JAK Inhibitors?
JAK Inhibitors

- 2014- 2 Yale Researchers published a case report in JID
  - Male patient with h/o arthritis and alopecia totalis
  - Started on Tofacitinib (Xeljanz- JAK1/3 inhibitor) for arthritis
  - All his hair regrew
JAK Inhibitors Appear Promising

- **JAMA Derm October 2015**
  - Case report of Tofacitinib working for vitiligo

- **JAAD Feb 2016**
  - Case report of ruxolitinib working for pt with alopecia areata and vitiligo

- **JAMA Derm April 2016**
  - Topical ruxolitinib 0.6% cream bid for AA case report- hair seen at 12 wks
  - Oral tofacitinib for nail dystrophy associated with alopecia areata (JAMA)
    - 3 patients. Nails improved in all. Hair regrew in 2/3

- **Derm News July 2016**
  - 12 patients. 5/12 had alopecia totalis/universalis
  - 11/12 had regrowth, 7/12 had >50% regrowth
  - Recurrence is an issue

- **September 2016 - Oclacitinib approved to treat doggy eczema**
Tofacitinib for alopecia areata in 90 adult patients

- Severe alopecia areata, alo tot, alo univ
- Clinical response in 77%
- 58% had intermediate-complete response over 4-18 mos
- Consider adding in pulse pred for nonresponders
- After 10 yrs of complete scalp hair loss, pts are less likely to respond
- No serious adverse events over 12 mos
- When to stop treatment still unclear; probably indefinite
Tofacitinib for alopecia areata in 13 adolescents

- Ages 12-17
- Used 5 mg bid dose
- Hair regrowth in 70% of patients
- Safety questions- baricitinib being studied for treatment of interferon-mediated autoinflammatory syndromes in kids as young as 18 mos and URI appears to be the most common side effect in those kids
Good summary article of where things stand with JAKs and skin disease

8 Adolescents with alopecia universalis treated with Xeljanz

- 12-19 yrs old, all with 100% hair loss
- 5 mg bid x 5-18 mos
- No lab abnormalities
- All had >50% regrowth in scalp hair by 5 mos
- All slow for the first 5 mos and then rapid
- All patients satisfied and continuing the medicine
JAK Inhibitors

- Xeljanz (Tofacitinib) 5 mg bid
- Appears well tolerated- side effects include headache, GI upset
- Baseline labs
  - CBC with diff, CMP, lipid panel
  - TB test, Hep B, Hep C, HIV
- Repeat CBC with diff, CMP and lipid panel every month for 3 mos, then every 3 mos
- I have 2 patients currently on it for AA and 2 patients on it for vitiligo, doing well
- Topical versions probably still 2-3 yrs away
Birkenstocks!
Miscellaneous Tips and Tricks for Kids
MAM Air Pacifier

- For kids that have persistent dermatitis around the mouth, drool and irritation from pacifiers are a common cause
- Recommend the MAM Air Pacifier which is more open than most
Buzzy

- www.buzzyhelps.com
- Vibrates and you can attach a reusable ice pack to add cold
- Distracts the nerve fibers so the child feels buzzy and minimizes the pain they feel
- Place it on the skin “between the brain and the pain”
- Comes in plain black, a bee, and a ladybug
- Costs $70
- Easy to wipe down with an alcohol swab
Prize Box

- If you see a lot of kids, it really helps to have a small prize box or sticker box
- Cheap to buy things to fill it (most of the items cost less than a $1)
- Can help serve as a distraction
- Can help make kids feel comfortable
- Can “make a negative a positive” after painful procedures
The End!

- Feel free to contact me with any questions
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