REFRESHERS

• Management of atopic dermatitis and hemangiomas
• Look-a-like conditions for vascular birthmarks, acne and psoriasis
• Tech Update: Teledermatology
ATOPIC DERMATITIS: BESIDES TOPICAL STEROIDS AND CALCINEURIN INHIBITORS

• What should they NOT be using?
  
  • Scented detergents (eg. Dreft)
  • Most shampoos (irritants and allergens)
  • Many “baby” soaps
  • Many “natural” or “organic” lotions
ATOPIC DERMATITIS: BESIDES TOPICAL STEROIDS AND CALCINEURIN INHIBITORS

- **Probiotics** (or synbiotics) may be beneficial
- Safe natural options: **shea butter, coconut oil**
- **Bleach baths** to prevent bacterial infections
- **Routine moisturizing**, early age, immediately after bathing
- **Wet wraps** with damp cotton PJ’s, then dry loose PJ’s
- **Phototherapy**
- **Systemics**: methotrexate, azathioprine, mycophenolate
ATOPIC DERMATITIS: NEW KIDS ON THE BLOCK

• New non-steroidal topical option:
  • Eucrisa (crisaborole) topical ointment, PDE4-inhibitor
  • Ages 2 years and older

• New systemic option:
  • Dupilumab, human monoclonal antibody against IL-4 (SQ)
• 73 children enrolled (ages 1-18 years)
• Blinded, placebo-controlled, cross-over study
• Melatonin 3 mg nightly associated with shorter time to fall asleep
  • 21 minutes less than control
JUMP RIGHT IN!

SO REFRESHING
TOPICAL TIMOLOL 0.5% “EYE-OPENING”

• First reported Feb, 2010 in Pediatric Ophthalmology
CLASSIFYING HEMANGIOMAS

A: Superficial
B: Mixed
   Superficial and Deep
C: Deep
KNOWING WHEN TO CONSIDER TOPICAL THERAPY

- Superficial hemangiomas
- Impending ulceration
- Small facial hemangiomas
- Note: Scalp shown to have highest systemic absorption
HEMANGEOL (PROPRANOLOL)

- FDA-approved
- Less sugar and additives
- Less likely to worsen GERD
- Flavored (strawberry-vanilla)
COOL & REFRESHING!
CUTIS MARMORATA TELANGIECTATIC CONGENITA

- Fixed
- Dark purple
- Atrophy & Ulceration
- Pseudo-athletic appearance of affected limb
- Phlebectasias (linear blue venous dilations)
- Localized form associated with decreased girth>>length of limb
- Diffuse form associated with orthopedic, ocular, neurologic and other vascular abnormalities.
OTHER DIAGNOSES TO CONSIDER

Reticulated PWS

Infantile Hemangioma Precursor
REFER FOR GENETIC TESTING: PIK3CA GENE MUTATION

Macrocephaly-CM Syndrome
Acquired
Reticulated
Port-wine
Stain?
ERYTHEMA AB IGNE
REFRESHED YET?
COMEDONAL ACNE

Topical Tretinoin Please!

...& STOP USING COCOA BUTTER AS A FACIAL LOTION!!!
ACNE: INFLAMMATORY PAPULES AND PUSTULES

- Topical Tretinoin
- Topical Antibiotic
- BP Wash

…& SET REMINDERS ON HIS PHONE!!!
Blurish Discoloration From Minocycline

Topical Tretinoin
Oral Antibiotic
BP Wash

Consider Spironolactone For Females
NODULOCYSTIC ACNE

Isotretinoin
DISCOID LUPUS

• Besides discoid lesions, what other mucocutaneous findings are criteria for SLE?
SKIN FINDINGS IN SLE

1. **Malar rash**
   Fixed erythema, flat or raised, over the malar eminences, tending to spare the nasolabial folds

2. **Discoid rash**
   Erythematous raised patches with adherent keratotic scaling and follicular plugging; atrophic scarring may occur in older lesions

3. **Photosensitivity**
   Skin rash as a result of unusual reaction to sunlight, by patient history or physician observation

4. **Oral ulcers**
   Oral or nasopharyngeal ulceration, usually painless, observed by physician
АННННН!
PLAQUE PSORIASIS
PSORIASIS TREATMENT LADDER

• Topical steroids
• Non-steroids: Tacrolimus, pimecrolimus and calcipotriene
• Phototherapy
• Systemics:
  • Methotrexate, acitretin, etanercept (Enbrel), adalimumab (Humira) and, most recently, ustekinumab (Stellara)
CHEERS!
FROM THE CURB TO THE CLOUD
TECH UPDATE: TELEDERMATOLOGY

• Getting the best photograph

• Review of interesting curbside cases
  • A picture is worth 1000 words

• From the ‘curb’ to the ‘cloud’
HOW FAR WE HAVE COME!
DESIRE PATHS
TELEDERMATOLOGY IS A DESIRE PATH
PEDIATRIC TELEDERMATOLOGY IS A NEW FRONTIER

• BUMPY ROADS
• CAN GET MESSY
• CAN BE UNSAFE
• BEWARE OF THE COWBOYS AND BANK ROBBERS
Transparency and choice of provider
Verify identity of patient
Practice in area of expertise
Stay within a health care network
Communicate with PCP
Access to medical records
Offer in-person care when needed
Review side effects of medications
THE GOLDEN TRIANGLE

PCP

DERM
What (Not) to Wear to a Mud Run
Forty patients enrolled to determine:

1) Quality of parental photographs of skin conditions (avg. score 9/10)

2) Concordance of diagnoses between virtual and in-person dermatologists (89%)
   - Alopecia & nodules were cases of discrepancy
CURBSIDE CASE 1

• 4 year old with itchy papules on the left ear and cheek… and…
CURBSIDE CASE 1 = DERMATOPHYTID REACTION

• Curbside tips:
  • Get multiple photos
  • Get the whole story

• Clinical tips:
  • Not an allergic reaction
  • Treat with topical or oral steroids
CURBSIDE CASE 2

• 6 month old with red nodules on the bilateral thighs…
CURBSIDE CASE 2 = VACCINE INJECTION-SITE REACTION

• Curbside tips:
  • Well lit
  • Descriptors: Is it firm?

• Clinical tip:
  • Reassurance can be therapeutic
GETTING THE BEST SHOT
AS EASY AS 1-2-3
CURBSIDE CASE 3

• 5 year old with rash on face x several months
• Comes and goes, improves temporarily with topical steroids
• Has hand dermatitis
CURBSIDE CASE 3: PERIORIFICAL DERMATITIS

• Curbside tips:
  • Timing can be helpful
  • Smartphone cameras are awesome!

• Clinical tips:
  • Investigate ALL exposures to topical steroid
  • Treat with oral azithromycin three days per week x 2-3 months
SOME PICTURES ARE WORTH MORE THAN 1000 WORDS 😊
CURBSIDE CASE 4

- 10 year old with new itchy papules on the arms and trunk for one day
CURBSIDE CASE 4 = POISON IVY

• Curbside tip:
  • Tap the screen to focus
  • Avoid focusing on background

• Clinical tips:
  • ’Tis the season
  • Look for shapes and patterns (linear)
CURBSIDE CASE 5

- 2 year old with expanding pink annular patches for 5 days
- Not itchy
- No improvement with antihistamines
CURBSIDE CASE 5 = LYME DISEASE (ERYTHEMA MIGRANS)

• Curbside tip:
  • Overview + Close up

• Clinical tips:
  • Lyme expands outward
  • Multifocal disease
MORE LYME DISEASE
CURBSIDE CASE 7

• 9 year old male with papules on abdomen for 2-3 months
• Not painful or itchy
CURBSIDE CASE 7 = MOLLUSCUM

• Curbside tips:
  • To flash or not to flash?
  • Side-lightening can be helpful

• Clinical tips:
  • Molluscum dermatitis
  • “Infected molluscum”
MOLLUSCUM DERMATITIS
CURBSIDE CASE FROM PARENT

• 18 month old male with itchy eruption, low grade fever
• Mom notes itchy blisters, bumps and sores on legs, arms, hands and feet
ITCHY ENTEROVIRUS

• Curbside tips:
  • Overview shot and close ups
  • Stay out of the shadows

• Clinical tip:
  • Enterovirus infections can be itchy
  • Ok to use topical steroids
CURBSIDE CASE FROM LOCAL ER

- 3 month old full term female with rash x 1 day, spreading
VARICELLA IN AN INFANT

• Curbside tips:
  • Photos can help triage urgent cases
  • Young patients may need in-person examination

• Clinical tips:
  • Prior to vaccine, infants are at risk for VZV
  • Rule out HSV
CURBSIDE CASE FROM ONCOLOGY CLINIC

- 17 year old with AML on chemotherapy
- Papules on left arm, wrist now spreading to trunk
SCABIES

• Curbside tips:
  • Ask about rest of body
  • Know your context (immunocompromised)
  • Care coordination!

• Clinical tips:
  • Rule out infection
  • Full body exam FTW
TELEDERMATOLOGY CASE
DIRECT-TO-PATIENT

- 20 month old with persistent white bump on heel
- You have access to PMH, note ex-34 week twin, spent 2 weeks in NICU
HEEL STICK CALCINOSIS

• Curbside tips:
  • Having access to EMR is key
  • Document consult for PCP

• Clinical tips:
  • Heel stick calcinosis can persist for months to years
  • Usually self-resolves
SO WHAT’S MISSING?
TELEDERMATOLOGY @ CHOP IN 2018

- **Provider-to-Provider Pilot Spring 2018**
  - Completed QI Project at CHOP
  - Collecting data on satisfaction, healthcare utilization and wait times
  - Plan to seek reimbursement by health insurances after pilot

- **Direct-to-Patient Teledermatology Mobile App**
  - Development of app underway
  - Will be available to only CHOP patients initially
  - Pay-out-of-pocket
  - Planning for launch Fall/Winter 2018
Anything worth doing is worth doing well.

Hunter S. Thompson