Pediatric Pearls: A Potpourri

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Unrelated to the current presentation.
Practical Pearls

Psoriasis

Pyogenic Granulomas

Stubborn Warts

Scabies
Pediatric Psoriasis Comorbidity Update

• 1/3 of patients develop psoriasis before age 20
  – Many before age 2

• Does the comorbidity clock start ticking in childhood?
Psoriasis confers an independent risk for atherosclerosis, MI, stroke and early CV-related mortality.

Persistent systemic inflammation is proposed to contribute to this association.

Psoriatic March

Concept proposed to explain how severe psoriasis drives CV morbidity/mortality.

Boehncke et al. Exp Dermatol 2011
Boehncke & Schön Lancet May 2015
Thrombotic Event
MI / Stroke

- Atherosclerosis
- Endothelial Dysfunction
- Insulin Resistance
- Systemic Inflammation

OBESITY

Boehncke et al. Exp Dermatol 2011
Boehncke & Schön Lancet May 2015
If the *psoriatic march* is real, we may be able to prevent the progression by modifying psoriasis severity and obesity.

Horreau et al. JEADV 2013.  
Dowlatshahi et al. JID 201.  
Wooton, BJD 2013.
Psychiatric and Emotional Comorbidities

Anxiety
Depression
Bipolar disorder
Eating disorders
Social isolation
Risky behavior (drugs, alcohol)
Poor QOL
Caregiver QOL

Situational and intrinsic.

Bilgic et al Pedi Derm 2010
Kim et al Pedi Derm 2010
Kimball et al JAAD 2012
Todberg T et al BJD 2016
Tollefson et al JAAD 2017
Reciprocal exacerbating factors.

Each represents an insult to self-esteem and overall well-being.
What to do in general?

Remain vigilant at each visit.

Identify those at greatest risk.

*Overweight and obese; severe disease; low mood, risky behaviors.*

Weight loss/lifestyle interventions are key.

*Prevention is the best strategy*
*Refer to obesity/nutrition experts*
*Involve the entire family*
Treat Adequately.
Risks of undertreated disease may exceed medication risks.

FEB 8 2016
On TNF inhibitor and tapering MTX.
What to do specifically?

NPF and PeDRA
CSI: Comorbidity Screening Initiative

A multidisciplinary initiative to create a guidance document for practitioners based on the best available evidence.
What to do specifically?

NPF and PeDRA

CSI: Comorbidity Screening Initiative

Pediatric Psoriasis Comorbidity Screening Guidelines

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All Psoriasis Patients Aged 2-21

Annual

- Blood pressure
- BMI (body mass index)
- Arthritis screen
  - Joint pain / swelling / inflammation
  - Joint stiffness after rest or sleep
  - Limp
- Mood disorders screen
  - Anxiety, depression, substance abuse

Additional screening for DM, dyslipidemia, fatty liver as indicated based on weight and other risk factors.

Involve primary care MD. Psoriasis comorbidity screening recs do not depart from AAP or EU age-based recs.

Osier et. JAMA Dermatol 2017

1st systemic therapy approved to treat pediatric psoriasis.

- Lab monitoring:
  - PI: PPD before initiation and yearly
  - Other labs “at MD discretion”

- Pediatric Dosing:
  - 0.8 mg/kg/week, max of 50 mg/week
December 2016: Janssen Biotech submitted supplemental biologics license application to the FDA for approval of Stelara (ustekinumab) for mod-to-severe psoriasis in patients aged 12 to 17 years.

Approved for adults with mod-to-severe-plaque psoriasis since 2009.

Application based on data from the phase 3 CADMUS safety and efficacy study (Landells et al JAAD 2015).
Newer Systemic Therapies for Severe Pediatric Psoriasis

**Oral PDE-4 Inhibitor: Otezla**
- In trials now for pediatric psoriasis aged 6 and above
- ClinicalTrials.gov ID: NCT02576678

**Anti-IL17: Secukinumab**
- Case reports for GPP
  (Böhner et al JAMA Derm 2015)
- DITRA
  (Cordoro et al JAMA Derm 2016)

Stay Tuned!
Practical Pearls

Psoriasis

Pyogenic Granulomas

Stubborn Warts

Scabies
Dermoscopy to Diagnose Scabies

• Hunt for a little black dot at the end of a burrow
• Add mineral oil to the slide and scrape the dot
• Sensitivity (91%) and specificity (86%) (JAAD 2007).

Cinotti et al. Dermoscopy "delta-wing jet" appearance of Sarcoptes. Ann Derm Ven 2013
Dermoscopy: dark-brown triangular structures at the end of whitish wavy lines.

Skin scraping reveals multiple scabies mites at 10x magnification.

Less invasive option for uncooperative children.

Stubborn Warts
Psoriasis
Scabies
Pyogenic Granulomas

Practical Pearls
Topical Timolol for Pyogenic Granulomas

Timolol 0.5% GFS (gel forming solution)

2 or 3 times/day, results in few weeks

If already bleeding -> definitive Rx

PG may recur

Think about amelanotic melanoma in ddx!

Knöpfel et al. Timolol for PG in children. JAAD September 2016
**For Stubborn Warts: Wart Peel**

**Wart Peel** = 2% 5FU and 17% SA

- Compounding pharmacy varies by state
- Most will use NuCara Pharmacy
  - Local pharmacy may be cheaper
- Nightly under tape occlusion
- $88 includes shipping

WartPeel
2% 5 FU and 17% Salicylic Acid
Supplied in syringe applicator with 5mg compound in it
Consistency of the vehicle is like “Elmer’s Glue”
Includes tape and instructions
Average time to wart resolution: 1-3 months.
$88 = $84 for 5mg; $4 shipping

Product Video: www.wartpeel.com
http://www.wartpeel.com/training_video/
Thank you!

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