

Pediatric Dermatology Tips and Tricks

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DISCLOSURE OF RELATIONSHIPS WITH INDUSTRY

Vikash S. Oza MD

DISCLOSURES

Dove: Consultant – Honoraria

Pfizer: Grant recipient: Consultant-Honoraria

Visual Dx: Consultant-Honroraria



Let's tackle...

- Infantile hemangiomas who we treat
- Approach to the bald patch
- Warts the bane of all pediatric dermatologists
- Facial rashes during the COVID era
- Key morphology clues the 1 sec diagnosis
- Teledermatology it's here to stay



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Practicing in the Gray





The clock is ticking...

Infantile Hemangioma Growth



Tollefson M et al. Pediatrics 2012

Clinical Practice Guideline for the Management of Infantile Hemangiomas

Daniel P. Krowchuk, MD, FAAP,^a Ilona J. Frieden, MD, FAAP,^b Anthony J. Mancini, MD, FAAP,^c David H. Darrow, MD, DDS, FAAP,^d Francine Blei, MD, MBA, FAAP,^e Arin K. Greene, MD, FAAP,^f Aparna Annam, DO, FAAP,^g Cynthia N. Baker, MD, FAAP,^h Peter C. Frommelt, MD, FAAP,ⁱ Amy Hodak, CPMSM,^j Brian M. Pate, MD, FHM, FAAP,^k Janice L. Pelletier, MD, FAAP,ⁿ Deborah Sandrock, MD, FAAP,^m Stuart T. Weinberg, MD, FAAP,ⁿ Mary Anne Whelan, MD, PhD, FAAP,^o SUBCOMMITTEE ON THE MANAGEMENT OF INFANTILE HEMANGIOMAS

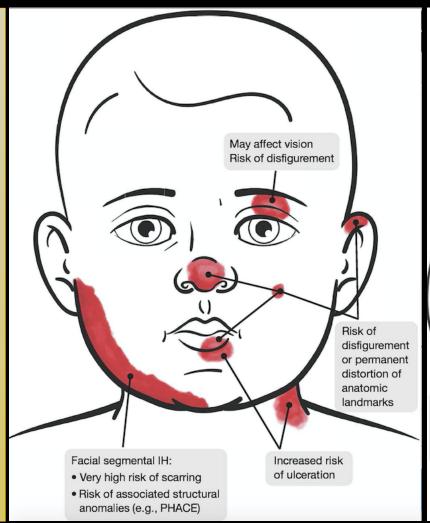
American Academy of Pediatrics

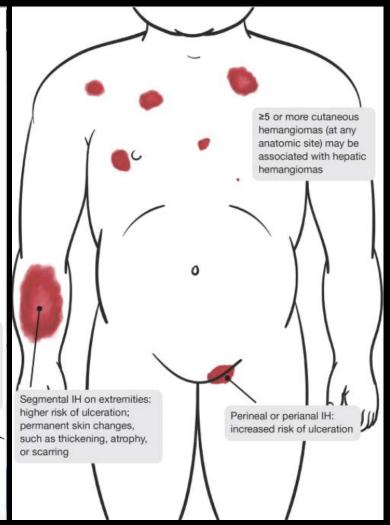


DEDICATED TO THE HEALTH OF ALL CHILDREN®

High Risk Infantile Hemangiomas – Disfigurement

- Segmental (esp. face or scalp)
- Nasal tip or lip
- Face: > 2cm (>1cm if less than 3months old)
- Scalp: >2cm
- Body: >2cm (esp if thick superficial)
- Breast (female infants)





PEDIATRICS°

ARTICLES | APRIL 01 2020

The Infantile Hemangioma Referral Score: A Validated Tool for Physicians FREE

Christine Léauté-Labrèze, MD ➡; Eulalia Baselga Torres, MD; Lisa Weibel, MD; Laurence M. Boon, MD; Maya El Hachem, MD; Catharina van der Vleuten, MD, PhD; Jochen Roessler, MD; Agneta Troilius Rubin, MD, PhD



Let's put this tool to use

Case 1: Forehead IH



Case 2: Hand IH



Infantile Hemangioma Referral Score

Case 1: Forehead IH

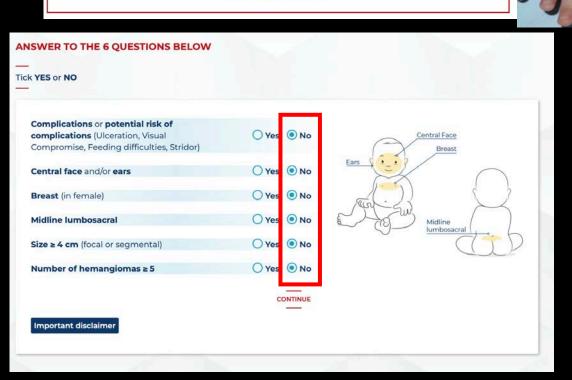
AT LEAST ONE OF THE PREVIOUS SITUATIONS IS TICKED "YES", HEMANGIOMA SHOULD BE THEF ERRED FOR CONSULT TO AN EXPERT CENTER.

ANSWER TO THE 6 QUESTIONS BELOW Tick YES or NO Complications or potential risk of complications (Ulceration, Visual O Yes

No Compromise, Feeding difficulties, Stridor) Central face and/or ears ● Yes ○ No O Yes No Breast (in female) Yes No Midline lumbosacral umbosacral O Yes O No Size ≥ 4 cm (focal or segmental) O Yes No Number of hemangiomas ≥ 5 mportant disclaime

Case 2: Hand IH

IF YOU TICKED NO TO ALL QUESTIONS, PLEASE COMPLETE THE NEXT QUESTIONS.

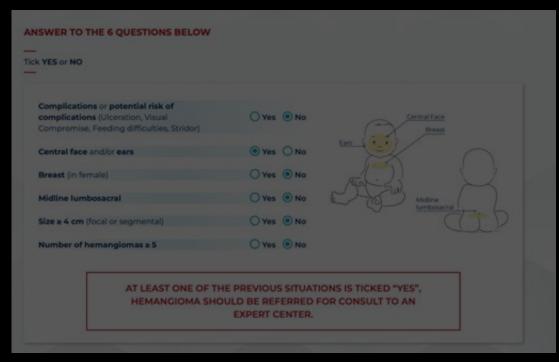


Infantile Hemangioma Referral Score



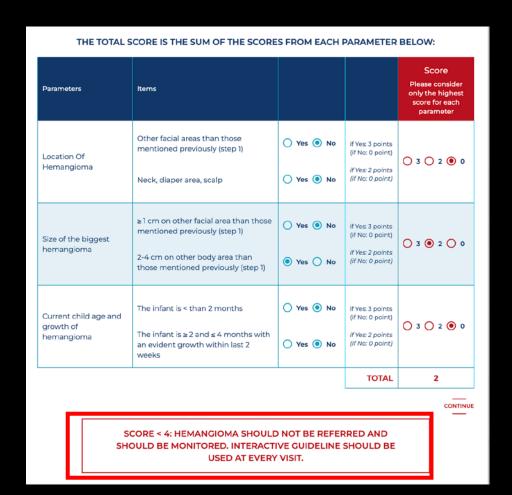
Case 1: Forehead IH

Refer!



Case 2: Hand IH

Size > 2 In on it a months



PEDIATRICS°

Topical Timolol Maleate Treatment of Infantile Hemangiomas

Katherine Püttgen, MD,^a Anne Lucky, MD,^b Denise Adams, MD,^b Elena Pope, MD,^c Catherine McCuaig, MD,^d Julie Powell, MD.d Dana Feigenbaum, MD.e Yulia Savva, PhD.f Eulalia Baselga, MD.g Kristen Holland, MD.h Beth Drolet, MD.h Dawn Siegel, MD,h Kimberly D. Morel, MD,i Maria C. Garzon, MD,i Erin Mathes, MD,e Christine Lauren, MD,i Amy Nopper, MD,i Kimberly Horii, MD, Brandon Newell, MD, Wei Song, MD, Ilona Frieden, MD, on behalf of the Hemangioma Investigator Group

Good Response

Superificial <1mm thick



After



Inadequate Response

Thick Superficial



Superficial and Deep



Deep



1 drop twice per day on surface of IH



Infantile Hemangiomas: Who we treat

- Location, location
 - Central face, Periorbital, Nasal tip, Deep and breast

Ulcerated

Elevated thick IHs with a step off edge

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10 year old with several months of a bald patch

Alopecia Areata





Trichotillomania



1. Shape of the hair loss





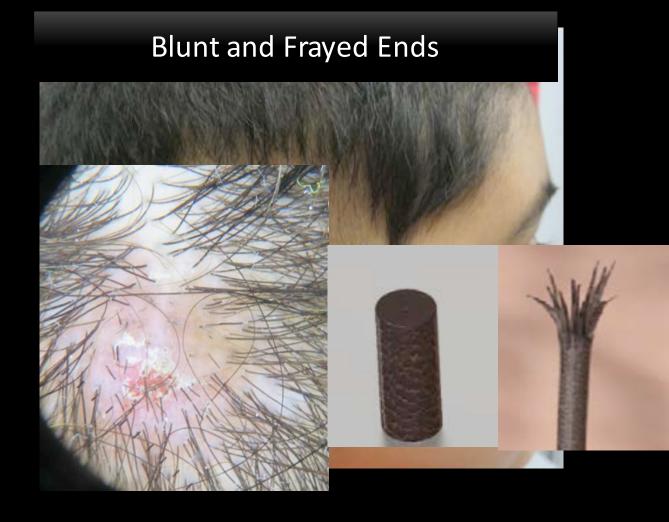
2. Hair of Unequal Lengths





3. Inspect the hair that remains





Rudnicka Let al. Dermalogic Clinics 2013

4. Positive Hair Pull (2+)



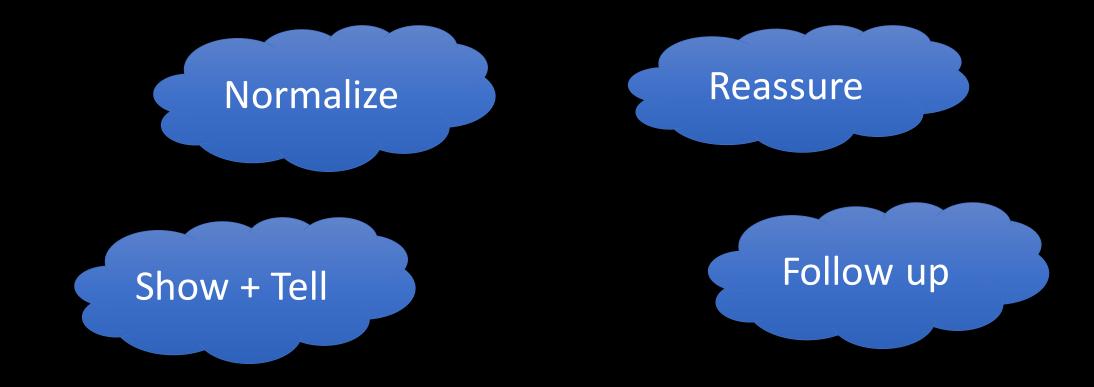


5. Symmetric Nail Pitting





Are you picking your hair?



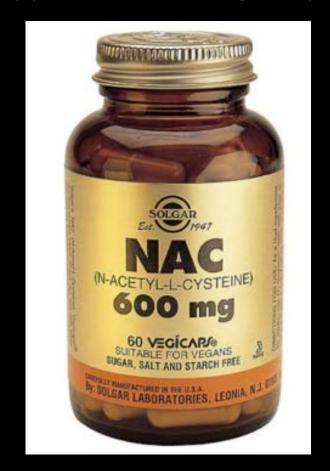
Automatic

Focused

Trichotillomania Management

- Cognitive Behavioral Therapy
- SSRIs, Naltrexone
- N-acetylcysteine supplementation

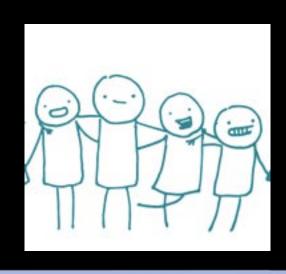
Supplement 1200mg daily



Habit Reversal Therapy







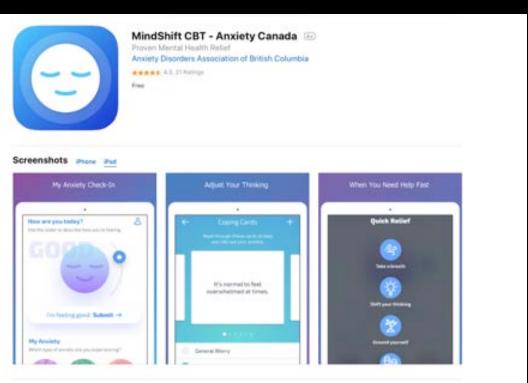
Recognition

Competing Response

Social Support

Resources





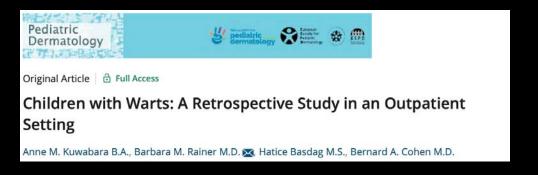
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When will these warts go away?



66% in 2 years 80% in 4 years

Does anything work?



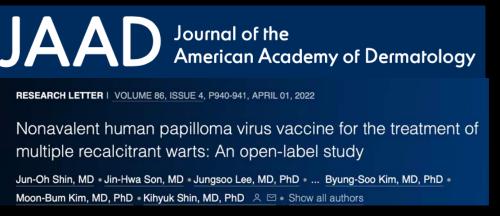
Cochrane Database of Systematic Reviews

Topical treatments for cutaneous warts (Review)

Kwok CS, Gibbs S, Bennett C, Holland R, Abbott R

- Topical salicylic acid shows modest benefit over placebo
- Cryotherapy as effective as salicylic acid (possibly better for hand warts)
- Duct tape as effective as placebo

HPV Vaccination as a treatment for stubborn warts



9 valent HPV Vaccine (HPV 9) in adults with recalcitrant warts (often periungal or plantar)
N= 45

3 months after last vaccine dose

Complete response: 62%

Partial response: 9%

No response: 30%

Wartpeel: Compounded Salicylic acid 17% and 5-FU

Common "go-to" for plantar warts



My approach

Fearful Child



Reassurance

- Salicylic acid17%
- Duct tape

Numerous warts

- Oral zinc (10mg/kg/day)
- Oral Cimetidine (40mg/kg/day) divided TID

Few warts



Cryotherapy every 3wks + Salicylic acid

Intralesional candida antigen

Periungal warts



Intralesional candida antigen

- Wartpeel
- Compounded cidofovir 1%

Plantar wart



Facial wart

Wartpeel Cryotherapy Q-tip

Topical retin-A

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Mask wearing and skin physiology



† Temperature

Redness

Sebum production

Hydration

Facial rashes in the time of COVID

Periorificial dermatitis



Irritant contact dermatitis



Facial rashes in the time of COVID

Periorificial dermatitis



Irritant contact dermatitis



Facial rashes in the time of COVID

Perioricial dermatitis

- Mindful of corticosteroid triggers
 - Topical steroids
 - Inhaled or intranasal corticosteroids

 A topical calcineurin inhibitor alone (i.e. Pimecrolimus cream)



Irritant contact dermatitis

- Mindful of saliva
- Emollient like Vaseline or Aquaphor when young

 Hydrocortisone 2.5% ointment or a non-steroid topical medication

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Bullous Impetigo Rapid Diagnostic and Therapeutic Quiz: A Model for Assessing Basic Dermatology Knowledge of Primary Care Providers

Daren J. Simkin, B.A.,* Anna L. Grossberg, M.D.,† and Bernard A. Cohen, M.D.†

*School of Medicine, Johns Hopkins University, Baltimore, MD, †Division of Pediatric Dermatology, Department of Dermatology, Johns Hopkins University, Baltimore, MD

64 physicians at John Hopkins (25 faculty and 39 house staff)

Bullous impetigo diagnosed correctly only 31% of the time

Morphology

Primary Morphology: Erosion + Vesicle

Size: 3-5 cm

Location: Face, Extremities

Secondary changes:

- Crust
- Collarette



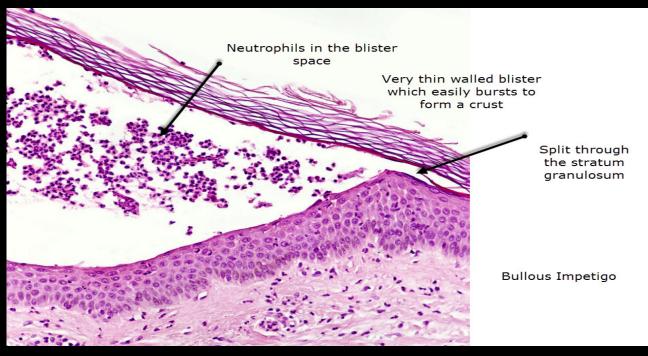
Bullous impetigo

Staph aureus infection

Split high up in the epidermis causes a fragile blister

Exfoliative toxin secreted locally cleaves
 Desmoglein 1

No systemic symptoms





Find that Sneaky Molluscum Contagiosum

ID Reaction



BOTE Sign (Beginning of the End)



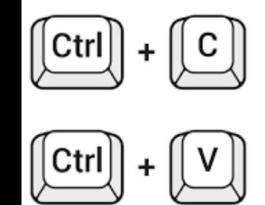
Molluscum Dermatitis





Eczema Herpeticum

- Monomorphous papules
 punched out erosions
- Periocular NEED OPHTHO eval to r/o keratoconjunctivitis
- Management:
 - Acyclovir PO: 30mg/kg/day divided TID x 10 days
 - Valacyclovir PO 20mg/kg per dose BID for 5-7days
 - No liquid needs to be compounded
 - Febrile and ill appearing may need to admit for IV acyclovir



"Eczema Coxsackium"

- Eczema herpeticum-like eruption
- Risk factors:
 - Atopic dermatitis
 - Darier
 - Epidermolytic ichthyosis
- Not associated with serious systemic illness



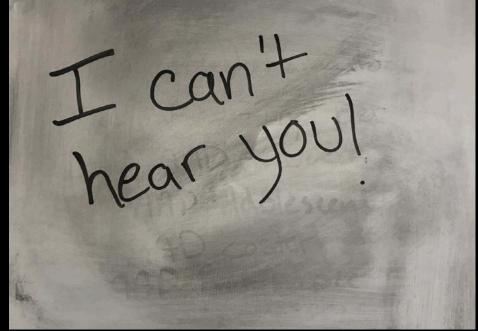
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The Practice of Pediatric Dermatology Now!









Pediatric Teledermatology: A few tips

 NEVER do a video visit without photographs for a pre-adolescent child

Guide families on how to take a photograph **DERMPICS.com**



Pediatric Teledermatology: A few tips

 NEVER do a video visit without photographs for a pre-adolescent child

Guide families on how to take a photograph

3. Adolescent Teledermatology: privacy issues



How accurate can we get?

Research

JAMA Dermatology | Original Investigation

Diagnostic Accuracy of Pediatric Teledermatology Using Parent-Submitted Photographs A Randomized Clinical Trial

Daniel M. O'Connor, MD; Olivia S. Jew, BA; Marissa J. Perman, MD; Leslie A. Castelo-Soccio, MD, PhD; Flaura K. Winston, MD, PhD; Patrick J. McMahon, MD

40 pediatric cases

- Photograph vs in-person evaluation

Table 2. Diagnoses Provided by In-Person Pediatric Dermatologist
and Concordance With Photograph-Based Diagnoses

Characteristic	Cases, No. (%)	Concordance, %	
All diagnoses	40 (100)	83	
Diagnostic category			
Alopecia	14 (35)		
Alopecia areata	8 (20)		
Seborrheic dermatitis (vs tinea capitis)	4 (10)	64	
Loose anagen syndrome	1 (3)		
Trichotillosis	1 (3)		
Nodules and tumors	3 (8)		
Epidermal cyst	1 (3)	67	
Pilomatricoma	1 (3)	– 67	
Pyogenic granuloma	1 (3)		
Rash	13 (33)		
Eczema	5 (13)		
Contact dermatitis	2 (5)		

Table 3. Cases of Diagnostic Disagreement

Case	Diagnostic Category	Photographic Diagnosis	In-Person Diagnosis
1	Alopecia	Trichotillosis	Alopecia areata
2	Alopecia	Alopecia areata	Trichotillosis
3	Alopecia	Alopecia areata	Loose anagen syndrome
4	Nodule	Juvenile xanthogranuloma	Epidermal cyst

Teledermatology: the verdict



Works well

- Derm triage
- Acne evaluation and management
- Reinforcing education (i.e. atopic dermatitis)
- Access to college students



Teledermatology: the verdict



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Doesn't work well

- Scalp disorders
- Dermal processes (nodules)
- Any condition where a complete exam is needed (i.e. genetic, connective tissue disorder)
- When procedures are needed



Questions?

