VCHIP / CHAMP / VDH COVID-19 UPDATES



Wendy Davis, MD FAAP - Vermont Child Health Improvement Program, UVM Breena Holmes, MD FAAP – Director of Maternal & Child Health, Vermont Department of Health May 4, 2020









Technology Notes

1) All participants will be muted upon joining the call.

If you dialed in or out, unmute by pressing #6 to ask a question (and press *6 to mute).

Presenters: Please avoid the use of speakerphone and make sure your computer speaker is muted if you dialed in via phone.

2) To ask or respond to a question using the *Chat* box, type your question and click the *p* icon or press Enter to send.

Chat (Everyone)	≣*
Everyone	







- □ May the Fourth Be with You! (*thank you, Jen Le/VCHIP*)
- □ Situation update
 - Surveillance
 - Testing
- VDH and Other Updates
- □ Practice Issues:



- COVID-19 Pediatric Inflammatory Response (COVID toes)
- Question and Answer

[Please note: the COVID-19 situation continues to evolve very rapidly – so the information we're providing today may change quickly]







Situation update





VDH Public Health Lab: 81 tests (5/2-3/20)

- UVMMC: 159 tests (5/3/20: 3 testing platforms)
- Hospitalized patients: 2 patients in ICU, ZERO patients on ventilator



Situation update (cont'd.)







- □ VDH Goal: increase to **1000 test per day** how to achieve this?
- Hospital and Long Term Care strategies in development
- □ Outpatient approaches:
 - Testing more mildly symptomatic patients
 - Video in development for correct collection procedure for nares (existing videos do not reflect current guidance)s.
 - Other ideas?
- Please remember to share your feedback regarding testing (nonpediatric) testing at pharmacies (discussed on our call 5/1/20)





- □ Major outbreak scenario (900 cases/week) staffing needs:
 - 129 new cases a day requires 65 investigators per day
- □ Minor Outbreak Scenario (300 cases/week) staffing needs:
 - 43 new cases a day requires 22 investigators a day
- □ Strategies to increase capacity under consideration:
 - Exploring opportunity to engage medical students
- □ Current capacity: 53 staff deployed full time to contact tracing

https://www.nytimes.com/2020/04/16/us/coronavirus-massachusetts-contact-tracing.html https://jamanetwork.com/journals/jama/fullarticle/2764427?guestAccessKey=7f7102ee-0372-4d2f-8f24c6d7f6d5b835&utm_source=silverchair&utm_medium=email&utm_campaign=article_alertjama&utm_content=olf&utm_term=040820







Concern re: possible engagement with retail pharmacies for pediatric immunization – please stay tuned!

Guidance under development (nearly final): Planning considerations for Return to In-person Education in Schools







Today's Media Briefing

- Some Farmers' Markets reopened with focus on safety
 - Shoppers pick up orders without samples



- More will open in May and June.
- Anticipate relaxation of some outpatient health care restrictions:
 - Strategy for increased testing/contact tracing critical as this occurs
 - Planning w/VAHHS, VMS, Bi-State Primary Care, Healthfirst
- Examples: clinic visits, diagnostic imaging, some outpatient surg./ procedures (NOT requiring hospital stay)
- Will look to open further if positive trends/resources support







Today's Media Briefing

Commissioner Levine:

□ First phase of health care "restart"



- Ensure proper precautions/closely monitor this phase first phase of restart
- Must demonstrate adherence to social distancing and relevant CDC GLs for infection control & prevention
 - Including but not limited to: process to screen pts. for COVID-related symptoms
 - Process to screen staff & essential visitors
 - PPE utilized as necessary to assure staff/patient safety





Practice Issues

COVID-19 Pediatric Inflammatory Response

Keith Morley, MD – Director, Pediatric Dermatology, UVM Medical Center Assistant Professor, UVM Larner College of Medicine











The heart and science of medicine. UVMHealth.org

Covid-related perniosis in children

Keith W. Morley, MD Assistant Professor, UVM Larner College of Medicine Division of Dermatology and Department of Pediatrics Director of Pediatric Dermatology

May 4th, 2020



Classic chilblains/pernio

- Erythematous / violaceous acral papules that result from an abnormal inflammatory and vascular response exposure to a cold and wet environment.
- Blistering, pustules, crusting, and ulceration can occur in severe cases.
- Initially pruritic and sometimes painful.
- Lesions usually appear over a few hours and resolve over 7-14 days. Typically self-limited but may be recurrent.
- Typically observed during the fall and winter in seasonal climates.
- Most common in children and young to middle-aged women.

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Classic chilblains/pernio

- Pernio can be a primary disorder or secondary to other conditions such as:
 - connective tissue disease
 - monoclonal gammopathy
 - Cryoproteinemia
 - chronic myelomonocytic leukemia
 - viral infections
- Compared with primary pernio, secondary pernio tends to be associated with photosensitivity and persistence beyond cold seasons.





Online rumblings

Did Whatsapp® reveal a new cutaneous COVID-19 manifestation?

TA Duong^{1,2}, C Velter^{1*}, M Rybojad^{3*}, C Comte³, M Bagot^{3,4}, L Sulimovic^{5*}, JD Bouaziz^{3,4*} ¹Dermatology Department, Henri Mondor hospital, Créteil, France



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Limited Information

9 results

A case of COVID-19 presenting in clinical picture resembling chilblains disease.

First report from the Middle East.

Alramthan A, Aldaraji W.

Clin Exp Dermatol. 2020 Apr 17. doi: 10.1111/ced.14243. Online ahead of print.

PMID: 32302422

Clinical characteristics of **COVID**-19 disease were identified in a cohort study involving 1099 patients from China. **COVID**-19 most commonly present with fever, cough, fatigue, and congestion. ...Another study focused primarily on cutaneous manifestations associated with **COVID**-19 evaluated 88 patients from Italy. 18 out of the 88 patients developed cutaneous manifestations, but only 8 patients developed skin lesions at onset of disease....

🕻 Cite < Share

Vascular skin symptoms in COVID-19: a french observational study.

2 Bouaziz JD, Duong T, Jachiet M, Velter C, Lestang P, Cassius C, Arsouze A, Domergue Than Trong E, Bagot M, Begon E, Sulimovic L, Rybojad M. J Eur Acad Dermatol Venereol. 2020 Apr 27. doi: 10.1111/jdv.16544. Online ahead of print.

PMID: 32339344

Coronavirus 19 (**COVID**-19) was declared as a pandemic viral infection by the World Health organization on March 11(th) 2020. Usual clinical manifestations of **COVID**-19 infection include fever, fatigue, myalgia, headache, diarrhea, dry cough, dyspnea that may lead to acute respiratory distress syndrome and death (1). ...Angiotensin-converting enzyme 2 (ACE2) is a cellular receptor for **COVID**-19....

🕻 Cite < Share

Chilblain-like lesions during COVID-19 epidemic: a preliminary study on 63

3 patients.

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Piccolo V, Neri I, Filippeschi C, Oranges T, Argenziano G, Battarra VC, Berti S, Manunza F, Belloni Fortina A, Di Lernia V, Boccaletti V, De Bernardis G, Brunetti B, Mazzatenta C, Bassi A.

Journal Pre-proof

HEALTH

Characterization of acute acro-ischemic lesions in non-hospitalized patients: a case series of 132 patients during the COVID-19 outbreak

D. Fernandez-Nieto, MD, J. Jimenez-Cauhe, MD, A. Suarez-Valle, MD, O.M. Moreno-Arrones, MD, PhD, D. Saceda-Corralo, MD, PhD, A. Arana-Raja, MD, D. Ortega-Quijano, MD





Chilblain-like lesions during COVID-19 epidemic: a preliminary study on 63 patients

Vincenzo Piccolo¹, MD, Iria Neri², MD, Cesare Filippeschi³, MD, Teresa Oranges³, MD, Giuseppe Argenziano¹, MD, Vincenzo Claudio Battarra⁴, MD, Samantha Berti⁵, MD, Francesca Manunza⁶, MD, Anna Belloni Fortina⁷, MD, Vito Di Lernia⁸MD, Valeria Boccaletti⁹, MD, Giovanna De Bernardis¹⁰, MD, Bruno Brunetti¹¹, MD, Carlo Mazzatenta¹², MD, Andrea Bassi¹², MD





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International Journal of **Dermatology**

Commentary

Chilblain-like lesions on feet and hands during the COVID-19 Pandemic

Nerea Landa¹, MD, Marta Mendieta-Eckert¹, MD Pablo Fonda-Pascua Teresa Aguirre³, MD

¹Department of Dermatology, Dermitek Clinic - Grupo stop, Bilbao, Spain; ²Department of Dermatology, Hospital Gór ³Primary Care Physician, Centro Bombero Echaniz, Bilbao, Spain











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Figure 2 (a) Initial erythematous and papular lesions on heels b) the same lesions one week later





However, the high number of consultations made for these rare lesions in the current epidemiological context makes us think





nternational Journal of Dermatology



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	-		Chilblain location/	COVID-19	Symptoms of	Close contact to	
		Age/sex	symptoms	positive	COVID-19,	COVID-19	Time in weeks during/prior/after COVID-19
	1	15/M	Toes, heel/ mild itchy	PCR negative Chest X-ray: bilateral pneumonia	Asymptomatic	No	Unknown: skin lesions led to the diagnosis of pneumonia, otherwise asymptomatic.
	2	15/F	Finger, heel/ mildly painful when pressing	Test not done	Nasal congestion, diarrhea	Father with COVID- 19, close contact	One week prior mild symptoms and 3 weeks after visiting her father
	3	23/F	Toes/mild itchy	Test not done	Fever, headaches, itchy	Lives in high risk area	3 weeks prior
	4	44/M	Toe/mildly painful when pressing	Test not done	Sore throat	Unknown	Sore throat 10 days earlier
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Table 1 Location and symptoms of chilblain-like lesions in children and adults during the pandemic

Mainstream

What Is 'Covid Toe'? Maybe a Strange Sign of Coronavirus Infection

Dermatologists say the lesions should prompt testing for the virus, even though many patients have no other symptoms.



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Prothrombotic features of virus? Indirect relation to staying home more often barefoot? Reporting bias?



Pathogenesis?

A CASE OF PERNIO-LIKE LESIONS ("COVID TOES") WITH HISTOLOGIC CONFIRMATION OF MICROTHROMBI

Alicia C. Sigal, M.D. (1), Jonathan R. Zirn, M.D. (1,2), Graeme M. Lipper, M.D. (2), Philip E. Shapiro, M.D. (1,3)

(1) Dermatopathology Laboratory of New England, Meriden, CT

(2) Advanced DermCare, Danbury, CT

(3) Department of Dermatology, Yale University School of Medicine, New Haven, CT

The case report below supports the following three points:

"COVID toes" are different from idiopathic pernio

• Microthrombi are involved in the pathogenesis of "COVID toes"

Microthrombi may occur in the absence of severe COVID-19 disease

We have decided to publicize this case report on social media (which precludes publication in a peer-reviewed journal, but which does indeed allow for peer review) because we believe that this is the fastest way to disseminate new information, particularly as physicians and scientists at this moment are trying to get a grasp on the role of microthrombi in the pathogenesis of COVID-19 disease in order to develop better treatments. If this report sheds some light on the pathogenesis of more severe disease (pulmonary, CNS, etc.) and one life is saved because of earlier understanding, then our mission will be accomplished. This is being posted first where dermatologists, pathologists, and dermatopathologists will view it, but we encourage sharing with experts in fields such as critical care medicine, vascular disorders, and immunology who may have interest in it. Thank you.





- Rate of positive covid tests in the French and Italian published series of those with pernio-like lesions seem to be at the least no worse than the background rate of covid in the community.
- In Italy about ~10% of all people testing positive nationwide, France slightly higher at ~15%.
- Of those tested in those two studies, when combined only 2/29 were positive (7%).





PCR nasal swabs? Antibody testing? Coag studies?

Most recommend PCR nasal swabs given liberalization testing requirement, no clear consensus on other tests.



Treatment

Therapy

Management of chilblains begins with conservative / behavioral measures. For patients who do not improve, pharmacologic therapies may be used.

First line:

- · Prophylactic warming of the extremities (eg, wearing gloves, socks).
- If patients smoke, counseling on smoking cessation should be provided, as smoking contributes to vascular disease, although its direct connection with chilblains is unclear.
- · Treatment of associated systemic condition if present.

Second line:

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- Medium to high potency topical steroids (eg, triamcinolone 0.1% cream or clobetasol cream twice a day) are typically employed. Efficacy is anecdotal, and no randomized controlled studies exist.
- · Nifedipine has been shown to alleviate symptoms by causing vasodilation in a small trial.
 - Adults 30-60 mg by mouth, every 24 hours as needed
 - · Adolescents 30 mg by mouth, every 24 hours as needed

Third line (adult dosing):

- Pentoxifylline (400 mg 3 times a day)
- Nicotinamide (500 mg 3 times a day)
- Aspirin (81 mg once a day)
- · Minoxidil (5% solution twice a day)
- Nitroglycerin (2% ointment twice a day)
- Tacrolimus (0.1% twice a day)

Antibiotic ointment or oral antibiotics may be necessary for a secondary bacterial infection.

My approach to treatment

- Behavioral modification, wearing not only warm socks/footwear constantly, but also maintaining core body temperature.
- High potency topical steroid applied twice daily under occlusion to pruritic areas on the toes and fingers, no more than 3 days a week.
- Nifedipine 10-30 mg nightly would be my next line for recalcitrant cases



Information Gathering

https://redcap.chop.edu/surveys/?s=TR8FTHF9KW

COVID-19 Acral Ischemia/Perniosis in Children

Dear SPD members:

Please help us collect important information on pediatric patients presenting with acral perniosis in order to better characterize this condition and its relationship to COVID-19. This short survey is intended for all health care professionals taking care of children who have developed acral ischemia/pernio or pernio-like changes in the setting of COVID-19 exposure. The case report form should take 10 minutes to complete and collects data on patients ages 0 - 18 years. Physician name and email are requested for each case entered to obtain more information if necessary.

All data will be de-identified and kept confidential and stored on a secure REDCap server at the Children's Hospital of Philadelphia. PeDRA researchers involved in data analysis will be allowed access to this data. The registry can be completed by health care professionals from all over the United States and all countries. **Patients should not enter their own cases.**

Please note the AAD is also collecting cases of dermatological changes in the setting of COVID. We encourage you to fill out the <u>AAD survey</u>. Pediatric cases should be entered into <u>SPD/PeDRA survey</u>.

Thank you,

Leslie Castelo-Soccio, MD, PhD - Children's Hospital of Philadelphia

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Information Gathering

https://redcap.partners.org/redcap/surveys/index.php?s=

YJWAJCX7TY



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Questions? Keith.Morley@uvmhealth.org



Upcoming Topics

Continue to follow developments in telehealth/phone coverage

- □ Health care "restart" details
- Summer camps/other recreational activities
- OneCare Vermont all-payer model adjustments
- □ UVM MC and HN plans to resume **necessary care**
- □ School reentry; adolescent well care; IZ catch-up (flu)
- Continuing developments re: inflammatory syndrome, COVID-19 toes





Questions/Discussion

- Q & A Goal: monitor/respond in real time record/ disseminate later as needed (and/or revisit next day).
- □ For additional questions, please e-mail:
 - vchip.champ@med.uvm.edu
 - What do <u>you</u> need how can we be helpful (specific guidance)?
- □ VCHIP CHAMP VDH COVID-19 website:

https://www.med.uvm.edu/vchip/projects/vchip_champ_vdh_covid-19_updates

- Next CHAMP call: Wednesday, May 6, 12:15-12:45 (same webinar/call information invitation to follow)
- □ Please tune in to VMS call with Commissioner Levine:

Tomorrow, Tuesday, May 5, 12:15-12:45

Phone: 1-802-552-8456

Conference ID: 993815551



