Covid-19 skin signs

Susi Harris November 2020 A journey via: NB Medical podcast S2 E3 – Dr Philippa Davis, GP BAD Website: covidskinsigns.com 3 papers in British Journal of Dermatology

Everything I say is probably about to become untrue....

- Rapidly evolving field
- Probably under-reported because:
 - Intense growth of pandemic and critically ill patients hampered systematic skin reviews
 - Often short duration
 - Usually asymptomatic
- Early report from China 0.2% hospital patients
- Sporadic single case or small series reports
- All confirmed PCR+ve

It's messy!

- How common?
 - 0.19-20% Covid associated with cutaneous manifestion.
- How ill do you have to be?
 - Any severity from whole spectrum is possible
 - May be the only symptom that ever appears
- Temporal association with C-19
 - May occur before, during or after other symptoms appear.
- What does it look like?
 - Extremely heterogeneous group of skin signs

First attempt to categorise – Casas et al, April 2020

- Rationale:
 - to recognize paucisymptomatic patients
 - epidemiological control esp in countries with poor access to tests.
 - might provide prognostic information
- All Spanish dermatologists over 2 week period
- Asked to report and send photos
- Criteria:
 - Rash/eruption appeared in last 2 weeks
 - Suspected/confirmed C-19, no other explanation
- Independently reviewed and classified
 - 4 dermatologists
 - blind to Hx
- Identified 5 main groups.



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With oedema



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Sometimes vesicular



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1. Chilblain-like, aka 'Covid toes'

- Purpuric areas
 - Acral fingers and toes
 - usually asymmetrical
 - Often oedematous
 - Occasionally vesicular
- Younger patients/less severe disease
- Lasted longer (mean 12.7 days)
- Around 20% of cutaneous presentations
- 55% develop no other symptoms
- Itchy and painful
- Tend to occur later in disease process (majority after)
- Can occur in other family members



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Can be in clusters



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Can be on limbs



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2. Vesicular eruption

- 10% of presentations
- 1:6 occured before onset classic Covid symptoms
- Often looks like chickenpox but all spots are at same stage (monomorphic)
- May affect family members





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3. Scaly maculopapular eruptions

- The commonest: around 50% of presentations
- Varies from perifollicular scaly lesions to Pityriasis Rosea–like
- Usually presents at same time as C-19 symptoms.
- 56% associated with pruritus
- Mean duration 8.6 days
- Associated more severe disease (2% mortality)





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4. Urticaria

- Around 20% of presentations
- Usually presents at same time as C-19 symptoms.
- 92% associated with pruritus
- Mean duration 6.8 days
- Associated mod-severe disease



Credit: Manalo, Iviensan; Smith, Molly; Cheeley, Justin; Jacobs, Randy (2020), "A Dermatologic Manifestation of COVID-19: Transient Livedo Reticularis", Mendeley Data, V1, doi: 10.17632/kgb87k7863.1 Creative commons kicence BY 4.0 10.17632/kgb87k7863.1#file-cd8c506e-0732-4312-aab2-7ce9087bc129

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5. Livedo reticularis/racemosa

- Purple mottling
- Reticulate 'Net-like' physiological
- Racemic clusters, pathological
- Similar picture to DIC ?vascular occlusion
- Less common (6%)
- Can be transient
- Affects older age group
- Usually associated severe disease (10% mortality)
- None from Zoe -? More likely seen in hospital

2 main groups containing 3 types each (Marzano et al)

- 1. Inflammatory/exanthematous mainly body
- (i) urticarial rash;
- (ii) confluent erythematous-maculopapularmorbilliform rash;
- (iii) papulovesicular exanthem;

<u>2. Vasculopathic/vasculitic – mainly digits</u>
(iv) chilblain-like acral pattern;
(v) livedo reticularis–livedo racemosa-like pattern;
(vi) purpuric 'vasculitic' pattern.

6. Purpuric/vasculitic: - RARE



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Other rashes seen in Covid-19:

- Possible reactivation
 - Vesicular rashes reactivation varicella? Simplex?
 - Also reports of increase in zoster
 - Case reports sudden appearance of warts
- Stress related
 - Psoriasis
 - Alopecia areata
- Drug related multiple types!

Covidskinsigns.com

- Library of images derived from Zoe app
- Sent in by patients so grouped more on distribution than pathology
- > Slightly different categories again!
- 2 new ones:
 - Oral
 - Exposed chest and neck eczema

Oral - lips



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Oral - Tongue



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Oral – palate/under tongue



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Neck and exposed chest eczema (photosensitivity pattern??)



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How this will change my practice

- If patient presents with new rash I will ask about C-19 symptoms
- If no symptoms, consider test.
- If symptoms present, rash is likely due covid explain and reassure likely self limiting

Refs

• C. Galvan Casas et al BJD 29.04.20

"Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases"

• Marzano et al BJD 01.06.20

"Cutaneous Manifestations in Covid-19, a preliminary review of an emerging issue"

• Seirafianpour et al BJD 08.07.20

"Cutaneous manifestations and considerations in COVID-19 pandemic: A systematic review"

• Manalo, Iviensan; Smith, Molly; Cheeley, Justin; Jacobs, Randy (2020), *"A Dermatologic Manifestation of COVID-19: Transient Livedo Reticularis", Mendeley Data, V1, doi: 10.17632/kgb87k7863.1*