



MIDEAST REGION

Wound, Ostomy, and Continence Nurses Society™

INDIANA | KENTUCKY | MICHIGAN | OHIO | WEST VIRGINIA

COVID Skin Manifestations

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COI Disclosure

Relevant relationships to disclose:

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None

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None

Learner Objectives



Participant will be able to:

describe one lesion frequently identified in the literature related to COVID.

compare and contrast lesions identified in the literature with those identified in practice.

identify the impact of COVID lesion management on WOC nursing.

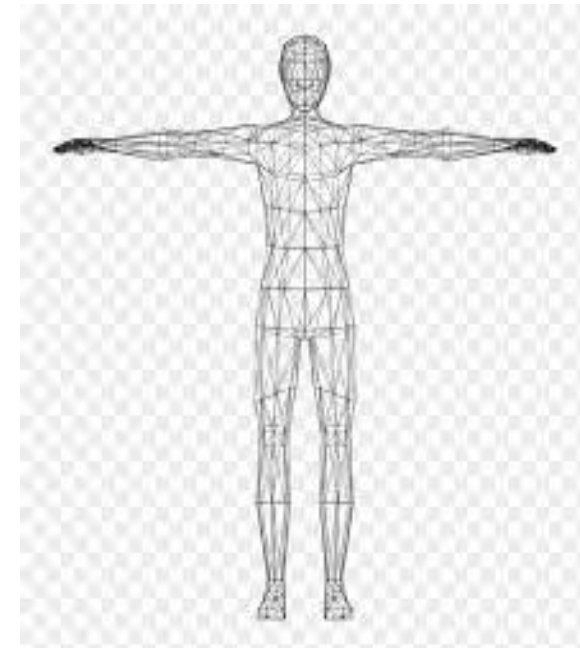
Literature Review

- ❖ Printed literature
- ❖ Online sources
- ❖ Webinars



Lesions in General

- ❖ Hand or feet
- ❖ Chest or back
- ❖ Limbs
- ❖ Facial or neck
- ❖ Prior to other symptoms
- ❖ Started simultaneously



Literature Review: Cutaneous Lesions

- ❖ Chilblains-like lesions
- ❖ Maculopapular eruptions
- ❖ Urticarial lesions
- ❖ Vesicular lesions
- ❖ Livedoid lesions
- ❖ Erythema multiform-like lesions (EM)



Chilblains-like Lesions

- ❖ COVID toes
- ❖ Superficial inflammatory vascular response
- ❖ Exposure to cold
- ❖ Dorsum of toes and hands
- ❖ Asymptomatic, pruritic or tender



Chilblains-like Lesions

- ❖ Dusky erythematous papules, nodules, plaques
- ❖ Bullae
- ❖ Last from 10-14 days
- ❖ Good prognosis



https://www.medscape.com/viewarticle/930955#vp_1

COVID Toes



<https://www.aad.org/public/diseases/coronavirus/covid-toes>



<https://www.newsweek.com/covid-toes-teenager-13-year-old-struggles-walk-nine-months-1610962>



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

Chilblains-like Lesions: Treatment

- ❖ Protective and warming
- ❖ Topical corticosteroids
- ❖ Hydrocortisone creams
- ❖ Vasodilators
- ❖ Aspirin



Maculopapular Eruptions

- ❖ Viral
- ❖ Morbilliform rash (measles)
- ❖ Trunk and extremities
- ❖ Pruritic



<https://www.aad.org/public/diseases/coronavirus/covid-toes>



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

Maculopapular Eruptions: Treatment

- ❖ Supportive Care
- ❖ Corticosteroids
- ❖ Drug interaction



Urticarial Eruptions

- ❖ Nonspecific
- ❖ Viral infections
- ❖ Pruritic edematous wheals
- ❖ Disappear 24 hours
- ❖ Trunk, upper limbs



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

Urticarial Eruptions: Treatment

- ❖ Resolves with symptomatic treatments
- ❖ Antihistamines
- ❖ Steroids
- ❖ Drug interaction



Vesicular Lesions

- ❖ Direct toxic effect on keratinocytes
- ❖ Asymptomatic
- ❖ Present around day 3 of infection
- ❖ Trunk



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

Vesicular Lesions: Treatment

- ❖ Supportive
- ❖ Resolve without treatment



Livedoid Lesions

- ❖ Usually noted in adults
- ❖ Rarely seen in the pediatric population
- ❖ Severe cases see necrosis, scabbing, skin sloughing
- ❖ Two types:
 - ❖ Livedo reticularis
 - ❖ Livedo racemose



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

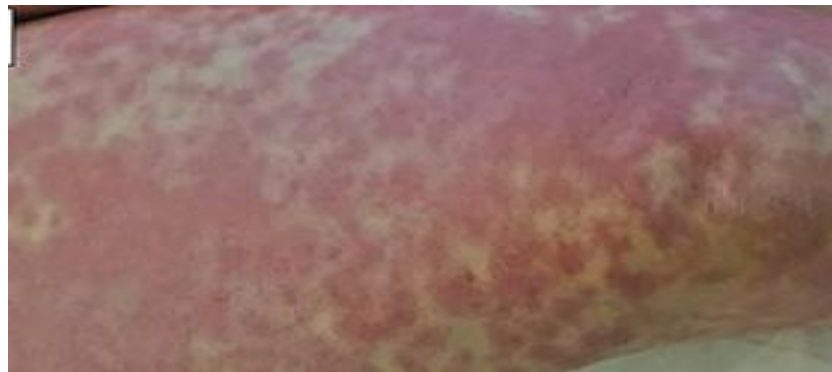
Livedoid Lesions: Livedo Reticularis

- ❖ Symmetrical, lace-like dusky patches
- ❖ Form rings with a pale center
- ❖ Along blood vessels



Livedoid Lesions: Livedo Racemose

- ❖ Irregular
- ❖ Asymmetrical dusky patches



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

Livedoid Lesions: Treatment

- ❖ Conservative
- ❖ Intensive care support
- ❖ Can include hospitalization



Erythema Multiform-like Lesions (EM)

- ❖ Hypersensitivity syndrome
- ❖ Typical and atypical target lesions with a central crust



[https://www.jaad.org/article/S0190-9622\(20\)32190-3/fulltext](https://www.jaad.org/article/S0190-9622(20)32190-3/fulltext)

Erythema Multiform-like Lesions (EM)

- ❖ Treatment
- ❖ Supportive care
- ❖ Consider medications



Multisystem Inflammatory Syndrome

- ❖ Severe Condition
- ❖ MIS-C in the US
- ❖ Pediatric Inflammatory Multisystem Syndrome (PIMS) in Europe



Multisystem Inflammatory Syndrome

- ❖ Shock-like symptoms
- ❖ Gastrointestinal symptoms
- ❖ Myocarditis
- ❖ Multisystem failure



https://www.pinclipart.com/pindetail/iiJhho_scare-clip-kid-electric-shock-cartoon-png-transparent/

MIS-C/PIMS: Lesions

- ❖ Polymorphous eruptions
- ❖ Trunk and flexural areas
- ❖ Macules, papules
- ❖ Acral erythema (hand-foot syndrome)
- ❖ Extremity swelling and desquamation
- ❖ Mucositis
- ❖ Fissured lips



<https://www.liebertpub.com/doi/10.1089/wound.2020.1309>

MIS-C/PIMS: Treatment

- ❖ Supportive care
- ❖ Iontropic support
- ❖ IV immunoglobulins
- ❖ Aspirin
- ❖ Corticosteroids
- ❖ Anakinra
- ❖ Infliximab



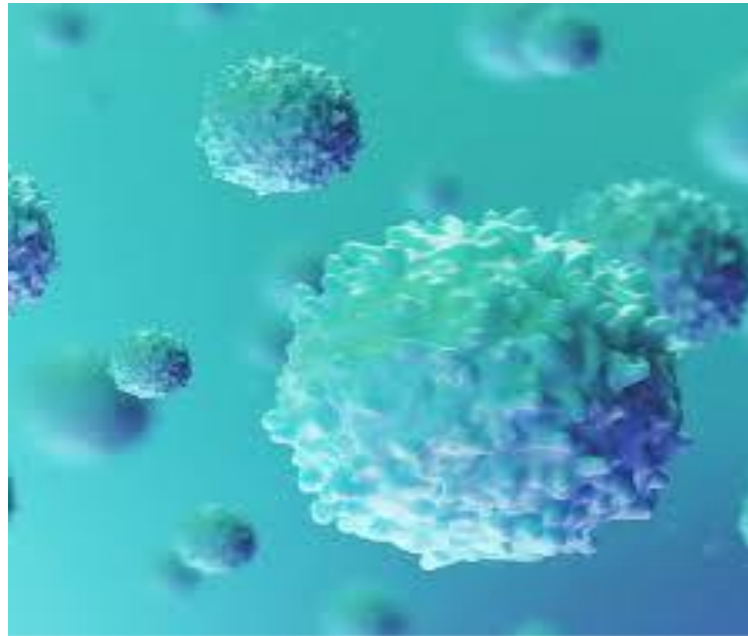
Literature Review: Treatment Approaches

- ❖ Supportive care
- ❖ Antihistamines
- ❖ Steroids
- ❖ Spontaneous resolution



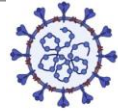
Literature Review: Treatment Approaches

- ❖ Other viral infections
- ❖ Drug reactions

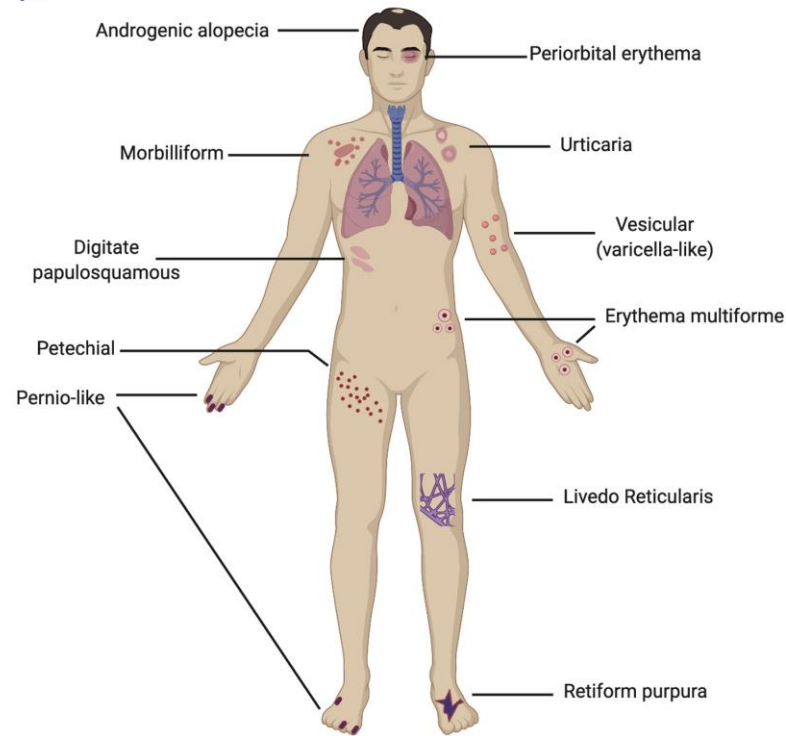


<https://urgentmednetwork.com/viral-infection-bacterial-infection-difference/>

Literature Review: Cutaneous Lesions



Reported Cutaneous Manifestations of COVID-19



Practice Findings: Pressure and Mucosal

- ❖ Pressure injuries
- ❖ Mucosal injuries
- ❖ Device-related injuries



UnityPoint Health-Peoria

**UnityPoint Health Central
 Illinois Region**

**Methodist Medical Center of
 Illinois**

Average daily census = 250

Proctor Hospital

Average daily census = 65

Pekin Hospital

Average daily census = 30



COVID Skin Manifestations due to Proning



Device Related Injuries



- ❖ Are they that simple?
- ❖ Were all interventions in place?

Evolution of Deep Tissue Injury



Case 1: 45-year-old female



Visit 7/27/2021



Visit: 7/31/2020



Visit: 8/3/2021



Visit: 8/3/2021



Visit: 8/7/2021



Visit: 8/7/2021-Breakdown under breasts



Visit 8/7/2021

❖ Cardiac arrest on 8/11

❖ Expired



Case 2 : Practice Findings



Case 3: Initial Consult



❖ Positioning

❖ Treatment

Evolution of Pressure Injury



No Longer Prone



Extubated: Continued Care



- ❖ Full Thickness Injury
- ❖ Multiple treatments

Case 4: Evolution of Injury



Case 5: Initial Injury



Case 6: Visit: 8/19/2021



Right Gluteal



Right Foot/Heel



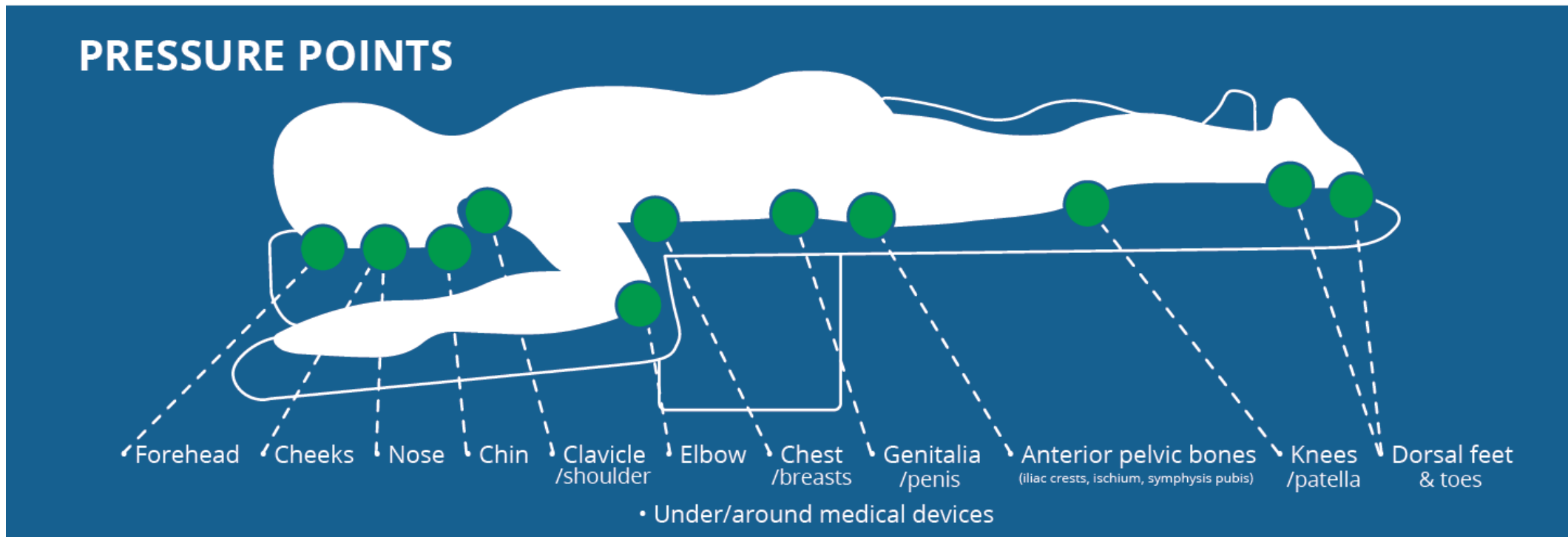
Visit: 8/24/2021 Right Gluteal



Visit: 8/27/2021 Right Gluteal & Right Heel



NPIAP Offloading Recommendations



Impact WOC Nursing Practice

- ❖ Turn team
- ❖ System wide protocol
- ❖ Multidisciplinary team collaboration

SWIMMING/FREESTYLE POSITION

- Patients in standard prone position can be repositioned using the swimming position.
- Alternate the position of the arms and direction of the head, in a manner that is similar to that of a freestyle swimmer.
- Pressure points on the diagram correspond to the body surface facing the mattress.



Impact WOC Nursing Practice

- ❖ Lack of resources
- ❖ Dependency on bedside nurses
- ❖ Balance struggles



Protocol: Non-intubated Proning

- ❖ Goal was to match pulmonary perfusion to ventilation to improve oxygenation
- ❖ Evidence supported



Protocol: Non-intubated Proning

- ❖ Contraindications
- ❖ Equipment
- ❖ Protocol Components



Protocol: Intubated Proning

- ❖ Goal was to increase pulmonary perfusion
- ❖ Evidence supported
- ❖ Contraindications
- ❖ Protocol components



Practice Treatment Approach

- ❖ Basic wound healing principles
- ❖ Product knowledge
- ❖ Resource utilization
- ❖ Restricted vendors



Who has felt this way?



**It doesn't matter how many resources you have
if you don't know how to use them, they will never be enough**

Resources: WOCN

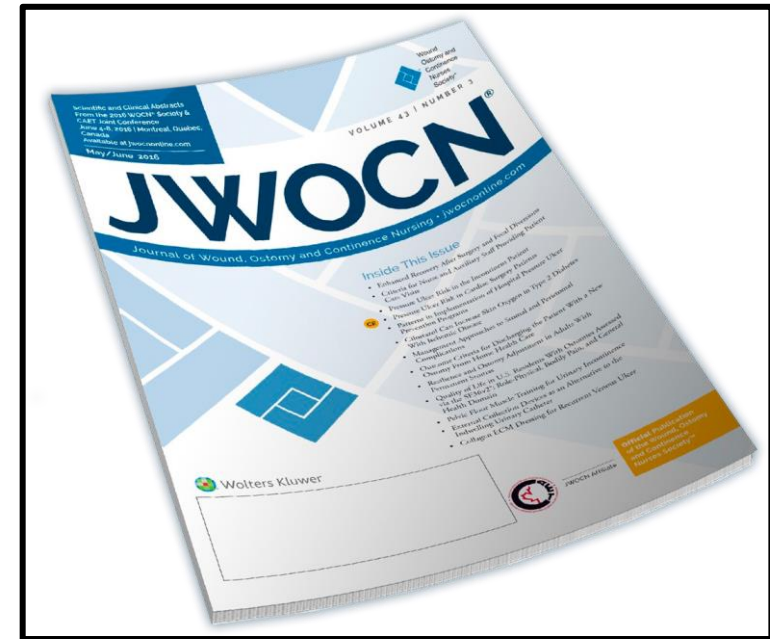


<https://www.wocn.org/>

- ❖ COVID-19 Community Forum
- ❖ COVID-19 Wound Photos Submission
- ❖ Guidance for Maintaining Skin Health When Utilizing Protective Masks for Prolonged Time Intervals
- ❖ Recommendations for Wound Assessment & Photo Documentation in Isolation
- ❖ COVID-19 Skin Manifestations: A Guide for WOC Nursing Practice

Resources: JWOCN

- ❖ July/August 2020
- ❖ September/October 2020
- ❖ November/December 2020



Additional Resources: WOCN

- ❖ Legislative & Administrative Actions in Response to COVID-19 Pandemic
- ❖ ANA COVID-19 Resource Center and Free Webinars
- ❖ COVID-19 Self-Recovery Package for Nurses – Free for ANA Members
- ❖ NDNQI[®] Product Update Related to COVID-19

Additional Resources: WOCN

- ❖ United Ostomy Association of America
- ❖ Lippincott Nursing Center
- ❖ Wolters Kluwer COVID-19 Resources and Tools
- ❖ Industry Resources
- ❖ Homeless during the pandemic: what to do and how to help

Impact WOC Nursing

- ❖ Still evolving
- ❖ Multidisciplinary approach
- ❖ Product knowledge
- ❖ Increased staff education
- ❖ Documentation



[https://www.whywoundcare.com/sites/default/files/2019-](https://www.whywoundcare.com/sites/default/files/2019-01/WWC%2BProfessional%2BPractice%2BModule%2B1%2BWound%2BCare%2BNurse%2BEducation%2BFINAL.pdf)

[01/WWC%2BProfessional%2BPractice%2BModule%2B1%2BWound%2BCare%2BNurse%2BEducation%2BFINAL.pdf](https://www.whywoundcare.com/sites/default/files/2019-01/WWC%2BProfessional%2BPractice%2BModule%2B1%2BWound%2BCare%2BNurse%2BEducation%2BFINAL.pdf)

References

Available as a separate handout.



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<https://www.stockfreeimages.com/p1/thank-you.html>