

COVID 19 Skin Manifestation in the Acute Care Setting

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Introduction/Problem

- * March 2020 World Health Organization declared a global pandemic
- * Massachusetts was one of the first states affected by COVID 19
- * Skin impairments noted on COVID 19 patients evolved differently from Deep Tissue Injury (DTI) despite similar appearance.
- * COVID 19 skin impairments were identified on areas on the body that were not on pressure points.
- * Review of literature: dearth of data related to novel virus
- * NPIAP white paper validated our suspicions that these skin manifestations were a result of a systemic process . Patients had coagulopathies, multisystem organ failure , hemodynamic instability

Aim/Goals

- Prevent pressure injuries
- Optimize nutrition
- Meticulous local wound care
- Safety for patients and staff

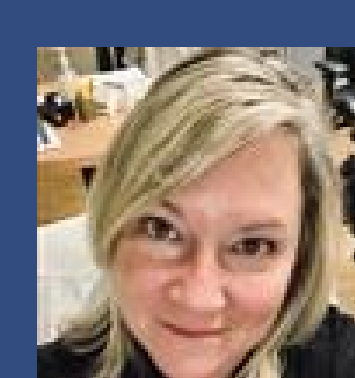
The Team



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The Interventions

- Wound care for COVID 19 patients was approached with a conservative manner honoring the principles of topical therapy
- **Bundled Care:** repositioning patients every 4 hours, decreasing amount of PPE used by staff, decreasing exposure
 - **Education:** pictorial resources for pressure injury prevention, application of foam dressings and off-loading techniques
 - A **mobile cart** for the proning team and ICU staff. This cart included a checklist and readily available supplies
 - **Alternate air mattresses** from in-house distribution
 - Debridement avoided due to risk of bleeding; **conservative topical therapy**

Results/Progress to Date



Covid skin Manifestation: top down injury located on soft tissue , lacy appearance , intact and non-intact skin with epidermal sloughing to reveal partial thickness skin loss. Lesions very friable

For more information, contact:

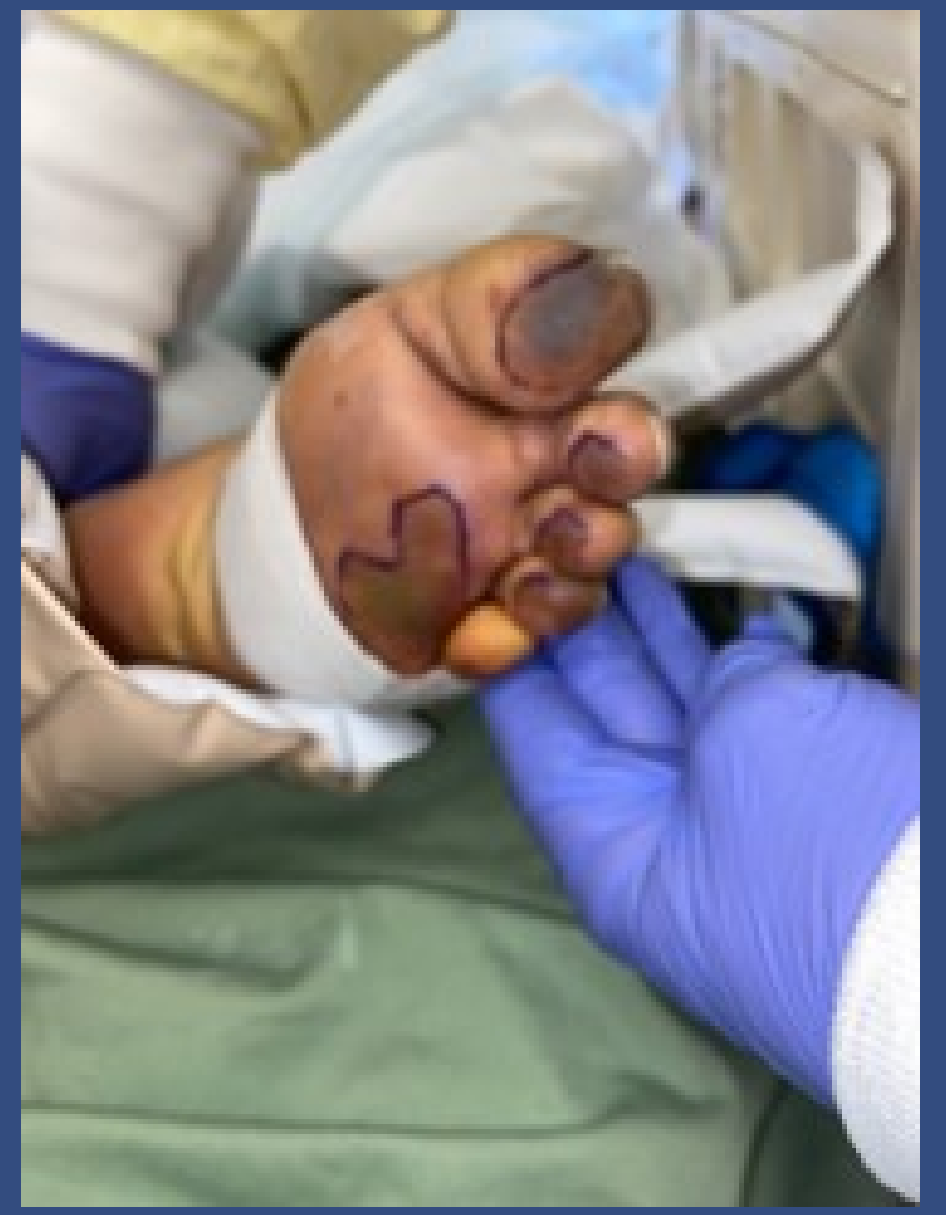
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More Results/Progress to Date



Covid skin manifestations most commonly seen on lower extremities , hands, feet, trunk.



Impaired blood flow to epidermis due to COVID 19 systemic coagulopathies. Top down injury that can lead to partial or full thickness skin loss.

Lessons Learned

- Tissue Injuries seen on Covid patients appeared as DTPI but were found to have a vascular etiology as evidence by histological tissue analysis and are now classified as Covid Skin Manifestations
- Patients that require proning cannot be placed on low air loss support surfaces, this is a contraindication
- Coagulopathy caused by the Covid -19 virus require a conservative approach to Wound Care, surgical sharp debridement is to be avoided
- Is it possible that not all DTPI's are from pressure but rather from systemic inflammatory conditions?

Next Steps

- Education of Medical and Nursing staff on the etiology and management of Covid skin manifestations
- Further exploration and research into whether Covid skin manifestations could be classified as Acute Skin Failure and if so, is this applicable to other critical ill patient populations that develop skin impairments
- Further investigation into the progression and deterioration of some Covid skin manifestation into full thickness wounds



DTPI defined as injuries that can have both intact and non-intact skin with localized area of persistent non blanching deep red maroon pigment change resulting from prolonged pressure and shearing forces. If not reversed can evolve into unstageable PI

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