



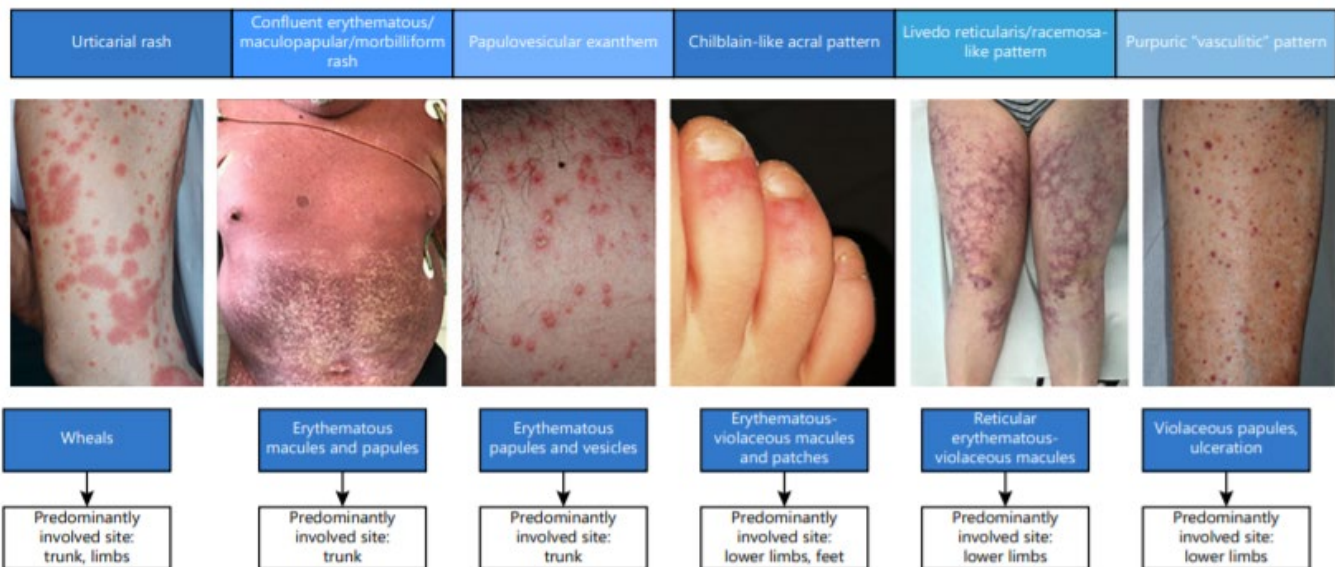
COVID-19 and the Skin

Introduction

Individuals with COVID-19 infection may experience skin lesions, which can have a similar appearance to pressure injuries. Some hospitals have published their findings about these phenomena or have reached out to the National Pressure Injury Advisory Panel (NPIAP) for guidance in diagnosis and treatment. Two recent white papers from the NPIAP shed light on COVID-related skin lesions that can be misdiagnosed as pressure injuries and pressure injuries that are not preventable in this patient population.

Understanding COVID-Related Skin Lesions

The following graphic shows examples of skin manifestations associated with COVID-19 infection. Of more



Source: Genovese, 2021

concern, however, are lesions such as those pictured below that look like deep tissue injuries but are related instead to COVID-19 infection. These lesions occur most commonly in individuals with severe COVID infection or with underlying chronic disease. They have also been noted in individuals with less severe infection, as well as those recovering from COVID infection. The lesions may occur in areas of the skin that have not been subject to shear or pressure but can also occur in areas typically associated with pressure injuries, such as those over bony prominences or under medical devices. The lesions are caused by COVID-19-related



Source: Singh 2020



Source: Huffington Post



Source: NPIAP



Source: WKRN

systemic coagulopathy in which micro-thrombi form and cause skin infarctions that give the appearance of deep-tissue injury. Infarcted skin can open and look like a Stage 2 pressure injury. Even in vessels where micro-thrombi have not formed, fibrin can accumulate and hinder tissue perfusion.

Tissue perfusion can be further challenged by other COVID-related factors such as poor oxygenation, systemic inflammation, cytokine storm, sepsis, multi-organ dysfunction, and shock. Treatment may require keeping the head-of-bed highly elevated and limiting use of IV fluids to optimize oxygenation. Use of vasopressors may become necessary. Nutrition is difficult to manage, because respiratory devices and rapid respiratory rates may hinder eating or drinking, and the patient will be in a COVID-related hypermetabolic state. Both enteral and parenteral nutrition may be contraindicated depending upon patient fluid volume status or risk of aspiration. These factors limit the effectiveness of standard pressure injury prevention techniques.

Distinguishing Pressure Injuries from ‘COVID Skin’

It can be difficult to distinguish COVID-related skin lesions from pressure injuries, but two things should be considered, the location of the skin lesion and the history of that area of skin in the prior 48 hours. Was it subject to shear or pressure? If not, it should not be considered a pressure injury. If it was subject to shear or pressure, the NPIAP recommends further assessment using gentle palpation. Deep tissue injuries involve tissues other than skin, so they are more likely to have a different consistency and temperature.

Pressure Injury Prevention

Pressure injury prevention strategies should be implemented with this at-risk population to the extent possible. Utilize wound care nurses, when available, for help in developing skin care plans and assessing and treating skin lesions. Stay abreast of emerging knowledge about COVID-19 infection and the skin.

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