

COVID-19 Pandemic and Personal Protection Equipment (PPE): A Focus on Treatment of Essential Workers with Hand Dermatitis

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Introduction

Due to COVID-19, extended use of PPE introduced an increased risk of dermatological conditions among health care workers. Many essential workers experience adverse skin reactions (ASRs) to the hands and face.¹ Additionally, increased hygiene measures, such as utilization of 60% alcohol based hand sanitizers lead to the disruption of skin flora and natural protections of the skin barrier.² Subsequently, bacteria, fungi, and viruses, such as the coronavirus, can penetrate through the skin into the bloodstream causing additional comorbidities.³

Though 90% of healthcare workers experience symptoms associated with hand eczema less than 15% recognize the symptoms as onset of disease.²

Case Report Information

54 year old female essential worker with a history of atopic dermatitis presents with a 6 week worsening of hand dermatitis due to frequent job related hand washing and sanitizing (~20x/day). Hand dermatitis is unresponsive to previously effective long term atopic dermatitis treatment plan:

- OTC cleanser (Cetaphil® PRO) twice daily
- OTC moisturizer (Cetaphil® PRO Eczema) twice daily and as needed
- Desoximetasone (Topicort®) ointment 0.05% twice daily for flares
- Loratadine (Claritin®) 10mg daily
- Adult multivitamin daily

Exam Signs and Symptoms

- Pruritis, pain
- Papules
- Erythematous plaques and scaling
- Excoriation
- Fingertip fissures

Intervention/ Treatment

- Prescribe physiologically balanced lipid skin barrier repair emulsion (EpiCeram®) twice daily and as needed
- Continued OTC cleanser (Cetaphil® PRO) twice daily
- Continued desoximetasone (Topicort®) ointment 0.05% twice daily for flares
- Continued loratadine (Claritin®) 10mg daily
- Continued adult multivitamin daily

Results



Initial Visit



2 Week Visit



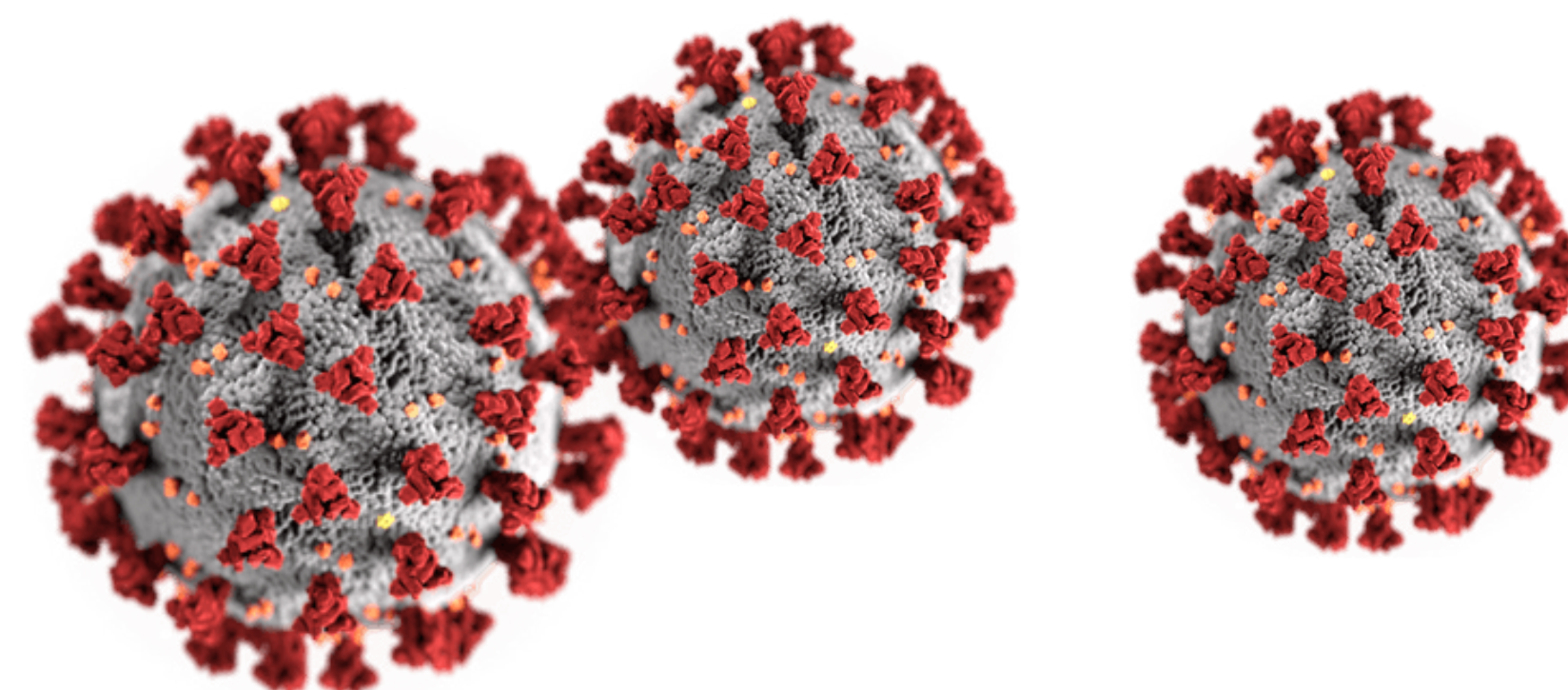
Initial Visit



2 Week Visit

Discussion

This case study demonstrates that a focus on proper barrier repair, which includes physiologically balanced lipids in a 3:1:1 ratio (ceramide:free fatty acid:cholesterol) delivered over time, is an important treatment option for ASRs due to frequent PPE use and hand washing/sanitizing not adequately responding to current treatment measures inclusive of topical steroids and over the counter moisturizers.



COVID-19 Resources and Guidelines



COVID-19 Training on TRAIN

Trainings on Infection Prevention and Control, PPE, Self-Care/Mental Health for Professionals



OpenWHO

Free Covid-19 Training Courses and Exercises, Patient Handouts/Stickers/Posters/Fun Activities



Latest research, Free CME, Public Health Guidance and Patient Information with a Special JAMA Dermatology Section Available



Free Evidence Based Skin Disease Booklets to Order or Download for Your Patients and Educational Grants and Funding Information



Database of Clinical Studies Available Around the World



New Symptom Tracker Launched to Fight COVID-19 Provides Real Time Data for Treatment Planning and Updated Recommendations

Conclusion

Due to the COVID-19 pandemic essential workers are at increased risk of developing various cutaneous conditions. Utilizing a 3:1:1 prescription skin barrier repair emulsion that delivers physiologic lipids is an option for quick and sustained resolution of dermatoses.

References

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3. Baldwin H, Aguh C, Andriessen A, et al. Atopic Dermatitis and the Role of the Skin Microbiome in Choosing Prevention, Treatment, and Maintenance Options. *J Drugs Dermatol*. 2020;19(10):935-940. doi:10.36849/JDD.2020.10.36849/JDD.2020.5393

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