Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Optimizing care for atopic dermatitis patients during the COVID-19 pandemic

To the Editor: We read with interest the recent *Journal of the American Academy of Dermatology* commentary by Shakshouk et al[1] regarding treatment considerations for pemphigus patients. The effect of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on the burden of disease and quality of life in patients with chronic inflammatory dermatologic conditions has been tremendous. Herein we highlight special considerations for caring for atopic dermatitis patients and minimizing flares during this time (Table I).

Increased hand washing and disinfectant use, and the prolonged wearing of masks and gloves, can lead to an increase in hand and facial dermatitis. Higher stress levels during this time may increase the risk of atopic dermatitis flares. Liberal use of moisturizers, especially on the hands, should be counseled. To decrease risk of contracting coronavirus disease 2019, patients are encouraged to purchase moisturizers in bulk or order for delivery, and providers

Table I. Strategies to minimize atopic dermatitis flares during the coronavirus disease 2019 pandemic

Strategy	Practical recommendations
Reinforce proper skin care regimen	Advise patients to follow proper hand-washing techniques (preferred over hand sanitizers if accessible) as described by the CDC; use warm water and soap and wash hands for at least 20 s; then gently pat skin until mostly dry
	Instruct patients to apply moisturizer to hands immediately after washing hands each time
	Counsel that hand sanitizer may be used if no access to water and soap; for example, when patient is outdoors or if patient without access to running water
	Gentle cleansers and hand sanitizers that do not contain high-risk sensitizing ingredients (such as fragrance or unnecessary antiseptic ingredients) should be recommended to minimize risk of allergic contact dermatitis
	Recommend applying a thick layer of a nonfragranced moisturizing cream or ointment such as petroleum jelly to hands every night
	Gloves should be worn when washing dishes or when cleaning with products such as disinfectant sprays
	Counsel patients to wear cloth face coverings (surgical masks should be reserved for health care workers) in public settings according to CDC guidelines, and the masks should be made from cotton (instead of irritating fabrics such as wool) and be free of synthetic dyes
	The cloth masks should be laundered regularly along with other clothing items, using fragrance-free detergent* that does not cause skin reactions in patients
Provide access to telehealth encounters	Instruct patients to take photographs of areas of concern for asynchronous store-and-forward visit, or examine areas during synchronous video visit
	Prioritize patients with complaint of AD flare to potentially diagnose and treat secondary infections (such as impetigo or eczema herpeticum) early
	Reinforce eczema action plans to empower patients to self-manage mild AD flares at home
Optimize AD treatment regimen†	Taper broad immunosuppressants such as prednisone, methotrexate, mycophenolate, azathioprine, and cyclosporine to lowest effective dose; consider discontinuing these medications in patients when viral symptoms are present[2]
	Appropriate patients may continue receiving dupilumab‡; consider discontinuation if upper respiratory tract viral infection symptoms present
	For patients with moderate to severe AD whose disease requires a new systemic agent during this time, starting dupilumab may be preferable to starting a traditional immunosuppressant, although more data are needed
	Discontinuation of Janus kinase inhibitors during initial infection may be beneficial, although their potential treatment role for the cytokine release syndrome is being investigated[3]
	Maximize pillars of AD treatment, including bleach baths, moisturizers, and topical therapeutics

AD, Atopic dermatitis; *CDC*, Centers for Disease Control and Prevention.

*Studies on optimal frequency of washing cloth masks and optimal fabric to use for cloth masks to specifically protect against COVID-19 exposure are lacking.

†Decisions on whether to continue immunosuppressant or immunomodulating agents if patients show symptoms concerning for COVID-19 should be made on a case-by-case basis.[2]

‡A recent meta-analysis that pooled data from seven randomized, placebo-controlled dupilumab trials found that dupilumab does not increase overall infections rates versus placebo.[4]

are encouraged to prescribe 90-day supplies of medications such as topical steroids to minimize repeated trips to the pharmacy.

Atopic dermatitis patients have been found to account for an increasing prevalence of emergency department (ED) visits in the United States,[5] which would currently place them at high risk of contracting coronavirus disease 2019, especially for those receiving immunosuppressants. Continued outpatient care through telehealth platforms is vital to help prevent and treat atopic dermatitis flares and to allow early recognition and treatment of secondary bacterial infections. Providers may examine patients' areas of concern via asynchronous or synchronous virtual visits and reinforce eczema action plans that empower patients to self-treat mild flares, and to recognize appropriate criteria to contact their provider.

Caution should be exercised with prescribing high-dose prednisone, given its broad immunosuppressive effects.[2] Other steroid-sparing immunosuppressants such as methotrexate, mycophenolate, azathioprine, and cyclosporine should be tapered to the lowest dose possible to avoid disease flare. The immunosuppressive effects of these agents that affect multiple cytokine axes have the potential to increase susceptibility and spread of viral infections, including SARS-CoV-2.[2] Lower doses of medication may allow less frequent monitoring laboratory tests, minimizing patient exposure risk. Dupilumab, a monoclonal antibody inhibitor of the interleukin 4/interleukin 13 signaling pathway, is a targeted immunomodulator with theoretic lower risk for SARS-CoV-2. It is reasonable for patients to continue dupilumab during the pandemic; if viral infection symptoms are present, the decision about whether to continue the medication should be made on a case-by-case basis. Finally, we recommend halting office-based phototherapy to minimize exposure, and instead encourage exposure of affected areas to natural sunlight, bleach baths, and wet wraps, inexpensive and effective alternatives.

Atopic dermatitis patients have a higher incidence of anxiety and depression than healthy controls. Stress and social isolation during quarantine may exacerbate these conditions. Recommending support groups through the National Eczema Association, engaging in moderate physical exercise, and stress-reduction techniques may benefit atopic dermatitis patients' emotional well-being and increase resilience.

Finally, participating in global registries to collect data on atopic dermatitis patients will facilitate outcome tracking and improvement of atopic dermatitis management during this time (https://www.aad.org/member/practice/coronavirus/registry; covidderm.org). Although the future is uncertain, the aforementioned recommendations can help to minimize risk of exposure and mitigate consequences of the pandemic on atopic dermatitis disease course.

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