



Atopic Dermatitis and COVID-19

Our knowledge of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and the resulting COVID-19 pandemic is constantly evolving. In particular, there are many questions about how COVID-19 affects patients with atopic dermatitis (AD). Here are some common questions:

1. *Are AD patients at higher risk for COVID-19?* While AD is associated with increased rates of certain cutaneous and extracutaneous infections, we don't know for sure at the moment. Preliminary evidence suggests that AD alone is likely not a significant independent risk factor for contracting COVID-19.
2. *Do systemic AD medications increase risk for COVID-19?* We are still gathering the data required to answer this question and establish official guidelines. Those using systemic immunosuppressive medications (e.g., methotrexate, mycophenolate, cyclosporine) may indeed have some increased risk, while those using targeted, non-immunosuppressive systemic therapies (e.g., dupilumab) are likely not at any increased risk, but again, this is currently unknown. At this time, patients and providers should follow evidence-based guidelines for AD management and take standard precautions to mitigate COVID-19 transmission.
3. *Do active skin lesions (especially with cracking, oozing, and weeping) increase risk of COVID-19 transmission?* While there isn't enough data to conclusively answer this question either, it is unlikely that active eczematous lesions increase risk of SARS-CoV-2, which is primarily transmitted through contact with oral, ocular, or respiratory mucosa.
4. *Does AD alter the risks or side effects associated with COVID-19 vaccination?* No. We are still learning more about vaccine reactions as we accumulate real-world data, but the main consideration would be known allergy to a specific vaccine ingredient or reaction to previous COVID-19 vaccine. Given that AD patients have higher rates of allergic comorbidities, current CDC guidelines recommend that patients with any history of allergy or anaphylaxis spend additional time in the vicinity of their healthcare provider immediately following vaccination and keep their epinephrine pen handy if necessary.

5. *Do AD medications interfere with any of the COVID-19 vaccines?* All AD patients are encouraged to seek COVID-19 vaccination regardless of medication regimen. Topical anti-inflammatory therapy and targeted, non-immunosuppressive systemic therapy (e.g., dupilumab) are not believed to suppress the immune response to vaccination. In contrast, systemic immunosuppressive therapy (e.g., methotrexate, mycophenolate, cyclosporine) might theoretically reduce the immune response to vaccination but is unlikely to prevent development of immunity. However, there is currently not enough evidence on this topic to make an official recommendation for AD patients. Healthcare providers should handle AD therapeutic management on a case-by case basis with an individualized discussion of risks and benefits of systemic therapy.

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