Updates From the NPF COVID-19 Task Force: Delta Variant and Boosters

The emergence of the Delta variant of COVID-19 has given rise to more questions from patients with psoriasis. Drs Joel Gelfand and Stacie Bell hosted a recent town hall to answer questions regarding COVID-19, vaccine boosters, and psoriasis.

Lauren Mateja, Managing Editor

Joel Gelfand, MD, MSCE, professor of dermatology and epidemiology, vice chair of clinical research and medical director of the dermatology clinical studies unit, director of the psoriasis and phototherapy treatment center, University of Pennsylvania Perelman School of Medicine, Philadelphia.

While society began to open back up with the emergency use authorization of several vaccines for the prevention of COVID-19, patients with psoriasis continued to have questions about staying safe and healthy. However, the rapid rise of the Delta variant of SARS-CoV-2 has created a considerable number of variables for patients and providers, leading to new unknowns and questions.

To highlight clinical best practices and evidence-backed recommendations, the National Psoriasis Foundation (NPF) hosted a town hall with Joel Gelfand, MD, MSCE, and Stacie Bell, PhD, for the Foundation's patient community.[1] Dr Gelfand is a professor of dermatology and epidemiology, vice chair of clinical research and medical director of the dermatology clinical studies unit, and the director of the psoriasis and phototherapy treatment center at the University of Pennsylvania Perelman School of Medicine in Philadelphia. He additionally serves on the NPF Scientific Advisory Committee and as co-chair of the NPF COVID-19 Task Force, which has offered guidance statements for health care providers caring for patients with psoriasis.[2] Dr Bell is the chief scientific and medical officer of the NPF.

Many of the answers offered by Drs Gelfand and Bell could be useful to keep on hand for your practice.

Do vaccines stop the spread of COVID-19?

"When people got infected with the SARS-CoV-2 earlier variants, it really looked like they wouldn't transmit the disease," explained Dr Gelfand. A brief communication published in *Nature Medicine* examined the viral load of positive post-vaccination samples between December 21, 2020, and February 11, 2021.[3] Their analysis of real-world data found such low levels of the virus that it was hypothesized that infectiousness was significantly reduced starting 12 days after the first dose of the BNT162b2 mRNA vaccine (Pfizer). In addition, two July preprints pending peer review found an overall effectiveness against transmission within a household.[4,5]

However, the Delta variant is much more contagious with an R-naught of 8.5, and so it is recommended that people with psoriasis follow precautions such as masking and social distancing while the variant is studied further.

Will the vaccine cause flares in patients psoriasis or psoriasis arthritis (PsA)?

According to the Centers for Disease Control and Prevention (CDC) Vaccine Adverse Event Reporting System (VAERS) database, out of 190 million people who received at least one dose of a COVID-19 vaccine, there were only 60 VAERS reports of psoriasis worsening.

"When [the CDC] performed what is called a disproportionality analysis, they have found that there does not seem to be any higher reporting of psoriasis flaring with this vaccine compared to any other vaccine ever studied," added Dr Gelfand. Thus, there does not seem to be a signal that vaccination against COVID-19 triggers psoriasis.

Dr Gelfand also cited multiple case reports in which COVID-19 infection caused severe psoriasis flares, including guttate, plaque, and pustular psoriasis. Anecdotally, he cannot recall a patient who has contacted him with worsening disease following vaccination, but Dr Gelfand said he can recall patients who have been infected with COVID-19 reporting a psoriasis flare.

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Stacie Bell, PhD, chief scientific and medical officer of the NPF.

Is a booster necessary for patients with psoriasis or PsA?

According to the CDC, patients with psoriasis or PsA on immunomodulatory therapies that may increase susceptibility to infection (eg, systemic corticosteroids, leflunomide, methotrexate, tofacitinib, apremilast, biologic agents, or T cells) are eligible for a third booster dose of an mRNA COVID-19 vaccine. Note that this CDC recommendation does not extend to the one-dose Ad26.COV2.S (Johnson & Johnson) vaccine.

Patients and their providers should work through a shared decision-making model to determine whether a booster is appropriate and beneficial for the patient. This third dose should be given at least 28 days following the two-dose regimen of the same vaccine as the previous doses.[1]

Patients who are most likely to benefit from a booster include:

- Those aged 50 years or older
- Those on abatacept, cyclosporine, leflunomide, glucocorticoids, methotrexate, and tofacitinib
- Those who received their second dose of an mRNA vaccine more than 6 months ago
- Those with underlying comorbidities known to increase the risk of severe COVID-19

"We don't have enough data yet to prove that the booster is necessary in everyone, to prove that it's necessary in people with psoriatic disease who are on immunomodulating therapy," said Dr Gelfand in the live Q&A with Dr Bell. He noted some observational data emerging from an Israeli preprint study that found the rate of infection from COVID-19 declines after a booster dose,[7] but the decision to get a dose should be a shared decision between patient and provider. "The way people should think about it is really [looking at their] underlying risks for getting in trouble with the virus...but there is really no downside to getting a booster," he added.

As for booster timing, Dr Gelfand reiterated that the CDC recommends no sooner than 28 days postvaccination. The 6-month postvaccination mark appears to be when symptomatic infection begins to reappear, so getting a third dose may be ideally completed by then. "But I wouldn't overthink the decision," he said, "because it is not an exact science."

Can psoriasis treatments impact the vaccine's effectiveness?

It is also not known whether those immunomodulatory therapies impact the benefits of the COVID-19 vaccines. So far, the literature studying psoriasis has only implicated methotrexate in affecting the humoral cellular response after one dose of the Pfizer vaccine, but the T-cell response seems to be preserved.[6] The NPF COVID-19 Task Force recommends that patients with psoriatic disease controlled by methotrexate "may, in consultation with their prescriber, considering holding [their next dose] for 2 weeks after receiving a [third] 'booster' mRNA vaccine in order to potentially improve vaccine response."[2]

"We generally recommend people stay on the therapies they are taking for their psoriatic disease during the vaccine period," explained Dr Gelfand. ■

Note: Providers are encouraged to visit the NPF for further guidance on handling COVID-19 questions for their patients with psoriasis at www.psoriasis.org/covid-19-task-force-guidance-statements/.

References

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What have we learned a year after COVID? **Drs Gelfand and Larry Green discussed what to know** about the virus and psoriasis in this podcast episode from April.