Rheuminating About COVID-19: A Rheumatologist's Perspective

Transcript

Amit Ladani, MD (Guest): But at this point of time, I do recommend all my patients to take the vaccine.

Meghna Rao (Host): Welcome to *Rheum Advisor on Air*, the official podcast of *Rheumatology Advisor*, one of Haymarket Media's leading publications that focuses on the latest news and research in rheumatology to inform clinical practices. I'm your host, Meghna Rao, the editor of *Rheumatology Advisor*.

In this podcast series, we will be looking at emerging topics in the field of rheumatology from various experts. These perspectives may be related to the diagnosis and treatment of rheumatic diseases, current guidelines, practice management, patient care, and much more.

Meghna: Over the course of this past year, [coronavirus disease 2019] (COVID-19) has presented unique challenges to rheumatology practices. Although not at the frontline, rheumatologists have had to face difficult decisions regarding, and not limited to, immunosuppressant management and the continuity of care for patients. But with the COVID-19 vaccines at the helm, what does the current rheumatology landscape look like and what is potentially in store for the future?

Our guest today, Dr Amit Ladani weighs in. Dr Ladani is a rheumatologist at West Virginia University Hospital and the author of a review on the topic of COVID-19 from a rheumatologist's standpoint.

Hello, Dr Ladani, and thank you for joining me on this episode.

Dr Ladani: Thank you for having me.

Meghna: First, talk to us about your recently published piece titled, "Rheumatologists' perspective of COVID-19". What was the intent behind this compelling piece and why is it relevant now?

Dr Ladani: My recent publication about COVID-19 from a rheumatologist's perspective was an invited editorial review due to the publication I [wrote] in a clinical rheumatology journal about managing rheumatic diseases during COVID-19. The reason I wrote the original article, as well as the subsequent article, was to give information to rheumatologists about what to do with the immunosuppressive medications. We were flooded with questions from not only the patients but also our colleagues managing [patients with] COVID-19 as to what to do with immunosuppressive medications. So, that in short, was the reason behind writing those 2 articles.

Meghna: On that note, what are some of the changes you have observed as a rheumatologist from when the pandemic started last year to the current times? I remember, and like you also mentioned, one of the things that was a conundrum for both rheumatologists and patients

early on was whether or not to continue immunosuppressive medications. And added to that were patients fears that may or may not have been the product of misinformation. But what's the status now and where are we on that?

Dr Ladani: Absolutely right. As the pandemic started and continued to evolve, we got questions about what to do about immunosuppressive medications as the patients were concerned whether they were at high risk of getting COVID-19. The early reports that were published were somewhat reassuring and [they] showed that [patients] who were on the immunosuppressive medications tended to [be] less likely [to get] severe complications of COVID-19. The immunosuppressive medications prevented the cytokine storm. However, subsequently, as more evidence came by, we recommended that patients to stop their immunosuppressives if they had COVID-19. They were strongly advised not to stop their immunosuppressives for the fear of getting COVID-19. And this was as a result of studies that came out and showed that uncontrolled disease activity that could result by stopping the immunosuppressives could be a high risk [of] getting an infection. So, in short, we suggested patients not to stop getting immunosuppressives for the fear of getting COVID-19, but to stop it when they were exposed or if they had COVID-19 or at least to call us for further guidance.

Meghna: Let's not forget the whole hydroxychloroquine crisis and the consideration of [interleukin] (IL)-6 and [Janus kinase] (JAK) inhibitors as treatment for severe cases of COVID and potentially the cytokine storm. All of this caused such a stir in the rheumatology community.

Dr Ladani: That’s exactly true. COVID-19 is a rapidly evolving area, and we were confronted with calls about the hydroxychloroquine crisis, as initial reports suggested that it might be effective in preventing the complications or the spread of COVID-19, which subsequently did not turn out to be true. There was a shortage in between and we had the pharmacists recommend that they would only fill the hydroxychloroquine if the prescription came from a rheumatologist, which was to safeguard the interest of people who were on it and really needed it.

On the other hand, the cytokine storm is an interesting thing. [In] managing the COVID-19 storm, there was initial and current interests about using the immunosuppressive medications we use in rheumatic practices like interleukin 1 [and] interleukin 6, [a]long with baricitinib. The use of tocilizumab and sarilumab was from a REMAP-CAP trial, which is a multinational trial. The preliminary non-peer-reviewed report showed that in patients [who were] admitted within less than 24 hours [to] the [intensive care unit] (ICU) and less than 15 days of admission, the hospital mortality was lower with 1 to 2 doses of tocilizumab or 1 dose of sarilumab. In fact, [b]aricitinib along with remdesivir has been approved to use in hospitalized nonintubated patients requiring oxygen, especially when they can’t take corticosteroids. The only robust data we have in managing the COVID-19 storm is the dexamethasone study, with patients requiring oxygen and [ventilation] support taking 10 days of dexamethasone. Moreover, in terms of stopping the immunosuppressive medication after the exposure, most medications, including conventional synthetic [disease-modifying antirheumatic drugs (DMARDs) and biologic DMARDs, need to be stopped, with the exception being maybe sulfasalazine.

There is also an increased interest about JAK inhibitors as it dampens the innate immunity and probably worsening the effect. However, baricitinib *[inaudible]* intercellular endocytosis preventing the [severe acute respiratory syndrome coronavirus 2] (SARS-CoV-2) virus to enter the cells and hence the emergency use authorization with remdesivir to be used in COVID-19.

Meghna: Rheumatologic conditions were historically not believed to lend themselves very well to telehealth. We did an extensive series on this very topic when the pandemic just began. But, very briefly, Dr Ladani, what has been your experience? How has the continuity of care been ensured in your clinical practice all these months, and what are your postpandemic plans?

Dr Ladani: Yes, spot on. I mean, it was a challenge to ramp up the telemedicine service, be it rheumatology or other subspecialties. But with the pandemic, I would commend on how quickly telemedicine services were ramped services up to the point that even [Centers for Medicare & Medicaid Services] (CMS) ramped up the payment portion of it. The barriers were taken down. We were doing much more telemedicine seamlessly in our clinic. We, however, suggested patients to at least see us once and subsequently for the follow-ups. If they were doing relatively fine or seemed to be in remission, we preferred doing telemedicine; and patients appreciated that. Specifically in areas that I practice *[inaudible]* for patients to come and see us is almost an hour. It was a boon for them.

I see forward, and even once the pandemic subsides, that people will continue to use it and so [will] the providers, and it is a win-win situation for both.

Meghna: Absolutely. And has anything surprised you regarding the use of telerheumatology methods? Because I think if there's one positive aspect that came out of the adversity that is this pandemic, it's that telemedicine has been adopted and adapted to quite well by both providers and their patients.

Dr Ladani: That's very true. And like I said, the barriers that existed in seeing patients from a different state, where you needed to have a license, were also waived. So, we were able to see many patients that came to see us from western Maryland, eastern Pennsylvania, or eastern Ohio, to West Virginia, where I practice.

Meghna: *Please note that the following content was developed and edited before the American College of Rheumatology released COVID-19 vaccine guidance for patients with rheumatic and musculoskeletal diseases. We will be providing updated information soon.*

Meghna: Now that brings us to the “glimmer of hope” that you rightly put in your article, the mRNA vaccines that were recently approved by the FDA, which is rolling out pretty quickly despite concerns about distribution, dosage, and so on. Now, although the vaccines that have been made available to all, what do you think of their effectiveness [in] immunocompromised patients or those with pre-existing autoimmune and rheumatic conditions, considering the fact that these populations may have been excluded from vaccine trials?

Dr Ladani: That's a great question! You are spot on [on] the fact that this information is missing as to what would be the effect on people who are immunosuppressed, pregnant and lactating women, and patients on chemotherapy. But at this point of time, I do recommend all my

patients to take the vaccine. The question is not about its safety, because it's not a live vaccine, so it's safe [for] any patients who are immunocompromised. The question we frequently encounter is how effective it [would] be. Now, extrapolating the data from other vaccines and immunosuppressive medications, for example, the influenza vaccine and the pneumococcal vaccine are not very effective when somebody is on drugs like methotrexate, abatacept, or rituximab. I tend to *[inaudible]* or conditionally recommend my patients on a case-by-case [s]cenario. If I'm sure that there are less chances of them having a flare-up while being on this agent, I recommend them to continue to discontinue a dose or two of methotrexate and abatacept after they take the vaccine, and also try to vaccinate them 3 to 4 weeks before the dose of rituximab, if that's possible.

Meghna: That makes sense. Even though rheumatologists may not be the ones administering the COVID-19 vaccine to their patients, I'm sure that patients are inundated by all this news surrounding the vaccines. And I think something to consider is that some patients may not want to receive the COVID-19 vaccine due to personal preferences, right?

Dr Ladani: That's very true. I try to talk to patients, specifically if they have had COVID-19. I tell them that there is no urgency, but they should absolutely get vaccinated in the future because getting a COVID-19 infection can protect them for a while; but all of them should be vaccinated unless they have absolute contraindications like allergies to polyethylene glycol, which is a component of an mRNA vaccine. Even allergies to eggs or gelatin or latex are not contraindications because the vaccine does not have any component of those.

Meghna: I also got some insight from my colleague, Chen Fang, the editor of Infectious Disease Advisor, and a pharmacist who regularly administers the COVID-19 vaccine to individuals in New York City. I asked her about the response and potential side effects of the COVID-19 vaccine in immunocompromised patients and this was what she noted.

Chen Fang, PharmD, RpH (Guest 2): There [are] a lack of data from clinical trials surrounding how patients who are immunocompromised tolerate the vaccine and whether the immune response is robust enough in this population.

There are some things we do know. We know that patients who are immunocompromised do not have as robust of a response compared with immunocompetent patients. We know that some immunosuppressants, such as methotrexate and rituximab, lower the immune response to influenza, pneumococcal, and hepatitis B vaccines. This brings up a valid and genuine concern for the COVID-19 vaccine.

In terms of side effects for patients who are immunocompromised, we don't have enough data yet to say anything conclusive. In New Jersey, immunocompromised patients were eligible for the vaccine beginning January 14, 2021. In New York State, the population of patients will be eligible for the vaccine beginning February 15, 2021. Every state is in their own timeline for rollout, which makes it more difficult to gather the appropriate data from the appropriate populations to reach conclusive answers.

I've seen and heard many physicians recommend patients on immunosuppressants wait to get the vaccine or begin setting up plans to taper their doses down in order to help facilitate a

more robust response. I've also seen and heard many physicians recommend getting the vaccine as soon as patients are eligible. As Dr Fauci said, during the American Society of Hematology meeting, “Some degree of immunity is better than no degree of immunity, when it comes to the vaccine response.” If patients who are immunocompromised do not get severe, life-threatening side effects from the vaccine and if the management of their disease is not hindered by the vaccine, current data [suggest] that the benefits outweigh the risks.

Meghna: I understand that the American College of Rheumatology is developing clinical guidance on SARS-CoV-2 vaccination in patients with rheumatic disease. But they have answered some preliminary questions in their Feb 2021 update about the continuation of immunosuppressive therapy during vaccination, risk for disease flares after receiving the vaccination, and vaccine information for patients who have recovered from COVID-19.

Dr Ladani: The conventional risk factors for COVID-19, like old age and comorbidities, are the only predictors for poor outcomes for COVID-19. So, all patients with rheumatic conditions should get vaccinated. The risk for disease flare, even though, theoretically, there is a chance to have a flare-up, there have been no definite studies out there or any data out there to suggest so, which is reassuring.

Meghna: Yeah, absolutely. With that, thank you for taking the time out of your day to speak with us, Dr Ladani.

Dr Ladani: My pleasure.

Meghna: Please stay tuned for more episodes in this series. For more information on Rheumatology Advisor and this podcast, you can reach out to us at editor@rheumatologyadvisor.com. We, at *Rheumatology Advisor*, look forward to delivering timely, evidence-based news to you. You can also sign up for our free newsletters on the site.