

## Herpes Zoster Vaccination Compliance: The Role of Specialist Rheumatology Nurses

To the Editor:

We read the paper by Sheth, *et al*<sup>1</sup> with great interest. The authors have brought out an important aspect of patients with autoimmune immune rheumatic diseases (AIRD) with the example of rheumatoid arthritis (RA) being at an increased risk of herpes zoster (HZ) infection. This is because of the disease activity itself, the immunosuppressive disease-modifying therapies, and other comorbidities<sup>2</sup>. In fact, such patients show a greater than 2-fold increased risk of serious infection and up to a 4-fold increase while receiving longterm glucocorticoids. Infection is one of the leading causes of morbidity and mortality in systemic lupus erythematosus<sup>3,4</sup>. These examples make it obvious that the patients with AIRD need to be protected against infections, and vaccinations are the most cost-effective method to prevent them.

Since the approval of tofacitinib for patients with RA, the problem of already existing increased incidence of HZ has been further aggravated. The reported incidence of HZ in patients with RA treated with tofacitinib is ~7% in developed countries<sup>5</sup>. HZ vaccination has recently been introduced in India (March 2016). To protect our patients against HZ infection, we as specialized rheumatology nurses have taken it upon ourselves to counsel each eligible patient to accept vaccinations in general (influenza, pneumonia, hepatitis) and HZ vaccination in particular.

We conducted a study of 100 eligible patients who were advised to receive HZ vaccine by the rheumatologist at our center. We did intense counseling, clarifying their doubts and explaining the importance and need for vaccination for preventing HZ infection and maintaining good health. In the followup, we recorded that of the 100 patients advised to receive the vaccination, 52 patients followed the advice and took the vaccine. Thus, after a single sitting of counseling, the compliance rate for HZ vaccine in our patients was 52%.

On reviewing the literature for the rate of HZ vaccination, the reported figure was found to be rather low (1.2%–4.5%)<sup>6,7</sup>. Our results show that counseling related to vaccination, in this instance against HZ, carried out by dedicated specialist rheumatology nurses appears to improve the compliance rate. The overburdened consultant rheumatologists may not have spare time for an in-depth vaccination counseling session with the patients. This is where the role of the specialist rheumatology nurses becomes important. Our results show that dedicated counseling by specialist nurses makes a difference. Therefore we strongly recommend that rheumatology clinics around the world regularly use the services of specialist rheumatology nurses for this purpose. This will not only improve the services in the rheumatology clinic in general, but also the vaccine compliance rate.

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## REFERENCE

1. Sheth H, Moreland L, Peterson H, Aggarwal R. Improvement in herpes zoster vaccination in patients with rheumatoid arthritis: a quality improvement project. *J Rheumatol* 2017;44:11–7.
2. Liao TL, Chen YM, Liu HJ, Chen DY. Risk and severity of herpes zoster in patients with rheumatoid arthritis receiving different immunosuppressive medications: a case-control study in Asia. *BMJ Open* 2017;7:e014032.
3. Listing J, Gerhold K, Zink A. The risk of infections associated with rheumatoid arthritis, with its comorbidity and treatment. *Rheumatology* 2013;52:53–61.
4. Danza A, Ruiz-Irastorza G. Infection risk in systemic lupus erythematosus patients: susceptibility factors and preventive strategies. *Lupus* 2013;22:1286–94.
5. Curtis JR, Xie F, Yun H, Bernatsky S, Winthrop KL. Real-world comparative risks of herpes virus infections in tofacitinib and biologic-treated patients with rheumatoid arthritis. *Ann Rheum Dis* 2016;75:1843–7.
6. Baker DW, Brown T, Lee JY, Ozanich A, Liss DT, Sandler DS, et al. A multifaceted intervention to improve influenza, pneumococcal, and herpes zoster vaccination among patients with rheumatoid arthritis. *J Rheumatol* 2016;43:1030–7.
7. Zhang J, Delzell E, Xie F, Baddley JW, Spettell C, McMahan R, et al. The use, safety, and effectiveness of herpes zoster vaccination in individuals with inflammatory and autoimmune diseases: a longitudinal observational study. *Arthritis Res Ther* 2011;13:R174.

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