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RHEUMATOID ARTHRITIS

Reducing the risk of herpes zoster

Patients with rheumatoid arthritis (RA) are at a higher risk of herpes zoster (commonly known as shingles, caused by varicella zoster virus infection) than the general population. In two new studies published in *Arthritis & Rheumatology*, Winthrop *et al.* explore strategies for reducing this risk: avoiding the use of combination therapies and vaccinating patients prior to starting treatment.

Both the disease itself and treatments for RA, such as glucocorticoids or the Janus kinase inhibitor tofacitinib, contribute to the increased risk of herpes zoster in patients with RA. In the first study, Winthrop *et al.* evaluated data from 19 clinical trials of patients with RA and found that the risk of herpes zoster is greater in patients receiving tofacitinib in combination with glucocorticoids than in patients receiving tofacitinib without glucocorticoids. As tofacitinib treatment was similarly efficacious in phase III trials irrespective of being used alone or in combination, Winthrop and colleagues concluded that the use of tofacitinib monotherapy could be one way to reduce the risk of herpes zoster while still providing effective treatment.

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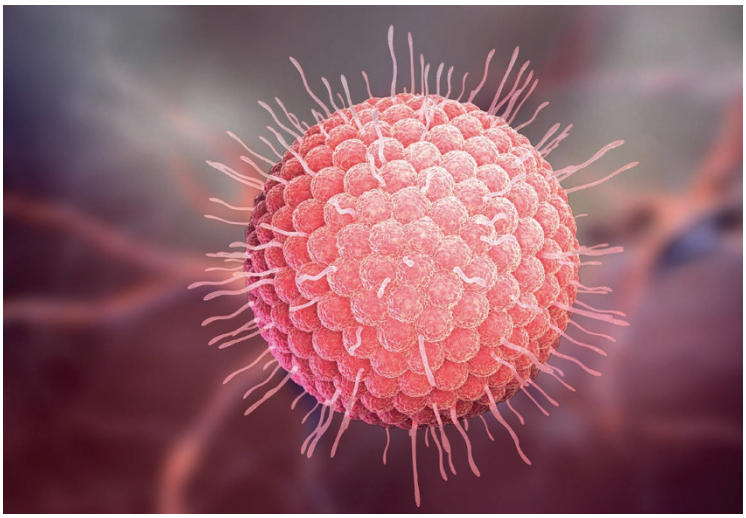

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Current recommendations suggest patients with RA should be vaccinated with the live zoster vaccine prior to commencing treatment with a biologic drug or tofacitinib, with guidelines advising physicians to leave a 2–4 week gap before beginning treatment due to the potential risk of vaccine dissemination in immunosuppressed patients. In the second study, Winthrop *et al.* evaluated the safety and immunogenicity of live zoster vaccination in the setting of RA prior to starting tofacitinib therapy.

At 6 weeks post-vaccination, patients who began tofacitinib treatment 2–3 weeks following vaccination had similar virus-specific humoral and cell-mediated responses to patients receiving placebo, suggesting tofacitinib does not negatively affect the immune response to this vaccine. The vaccine seemed to be safe in the majority of patients; although one patient with no prior exposure to the virus developed cutaneous vaccine dissemination after beginning tofacitinib therapy, indicating the need to either screen patients for prior viral exposure before vaccinating or increase the gap between vaccinating and commencing tofacitinib treatment.

Jessica McHugh

ORIGINAL ARTICLES Winthrop, K. L. *et al.* The safety and immunogenicity of live zoster vaccination in rheumatoid arthritis patients before starting tofacitinib: a randomized phase II trial. *Arthritis Rheumatol.* http://dx.doi.org/10.1002/art.40187 (2017) | Winthrop, K. L. *et al.* Herpes zoster and tofacitinib: clinical outcomes and the risk of concomitant therapy. *Arthritis Rheumatol.* http://dx.doi.org/10.1002/art.40189 (2017)