

Tozinameran

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Reactivation and dissemination of varicella zoster virus infection: case report

A 72-year-old man developed dissemination and reactivation of varicella zoster virus (VZV) infection, following vaccination with tozinameran for COVID-19.

The man presented with acute myelomonocytic leukaemia. He had received cord blood transplantation along with fludarabine, melphalan and antithymocyte-globulin. Also, he received tacrolimus for prophylaxis against graft-versus-host disease and aciclovir for prophylaxis against herpes zoster. Also, on day 333, he had received unspecified glucocorticosteroids. Subsequently, on day 589, he received the first dose of tozinameran [Pfizer-BNT 162b2 mRNA vaccine] and did not experience any early-onset adverse effects. Fourteen-day post vaccination, he developed intolerable and serious stomachache and back pain. Upon admission, his physical examinations revealed no significant manifestations. At that time, he received metformin and unspecified DPP-4 inhibitor for type 2 diabetes mellitus; apixaban and bisoprolol for paroxysmal atrial fibrillation and cotrimoxazole [trimethoprim/sulfamethoxazole] as prophylaxis against pneumocystis pneumonia. During, polymerase chain reaction serum viral load of VZV was highly elevated (1.4×10^3 copies / 1×10^6 cells), which indicating the diagnosis of visceral disseminated VZV infection. At four days after the initial pain attack, scattered and small raised bumps were noted on the skin of his abdomen, face and extremities, irrespective of the dermatomes. This exudate fluid of these bumps revealed positive VZV antigen.

Therefore, the man's treatment was started with aciclovir. Fourteen day after, his skin lesions and pain disappeared and PCR showed decreased serum viral load. His CD8⁺ T-cell count decreased after COVID-19 vaccination which leads to reactivation of VZV. After an interval of 8 weeks, he received the second dose of tozinameran vaccine without any adverse effects. Later, complete remission of leukaemia was noted without any post-infectious sequelae.

Nishimoto M, et al. Visceral disseminated varicella zoster virus infection following COVID-19 vaccination in an allogeneic stem cell transplant recipient. *Transplant Infectious Disease* 24: No. 2, Apr 2022. Available from: URL: <http://doi.org/10.1111/tid.13810> 803662075