

ZOSTAVAX VACCINE TRIGGERING BILATERAL ACUTE RETINAL NECROSIS DUE TO WILD-TYPE VARICELLA ZOSTER VIRUS

Purpose: To describe the clinical features of a case of bilateral acute retinal necrosis (ARN) due to wild-type varicella zoster virus (VZV) reactivation following administration of the Zostavax? (live attenuated VZV) vaccine for the prevention of shingles.

Method: This is a retrospective case report and a literature review. Clinical presentation, virological characterisation via polymerase chain reaction (PCR) and patient outcomes are reported.

Results: A 76-year old male presented with a painful red eye one week after receiving Zostavax? vaccine. He had a history of diabetes, B-cell chronic lymphocytic leukaemia and adult vitelliform macular dystrophy. Examination revealed panuveitis, retinitis and occlusive vasculitis. Wild-type VZV was confirmed through PCR of diagnostic core vitrectomy sample. Despite local and systemic antiviral therapy and corticosteroid, the patient developed central retinal artery occlusion with perception of light vision. The patient then developed ARN with dense vitritis in the fellow eye three months later. Vitrectomy with insertion of silicone oil was performed. Wild-type VZV was again detected from the vitreous sample. Literature review demonstrates only three previously reported cases of ARN related to VZV immunisation, but none of these demonstrated wild-type strain.

Conclusion: We report the first case of ARN due to wild-type VZV following Zostavax? administration. The outcome was poor due to occlusive vasculitis. This case emphasises that it is prudent to avoid herpes zoster immunisation in those who are immune compromised, but also to consider VZV as a cause of ARN even in those recently immunised.