

Tozinameran

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Exacerbation of branch retinal vein occlusion: 2 case reports

In a report, two patients (a 71-year-old woman and a 74-year-old man) was described, who experienced an exacerbation of branch retinal vein occlusion (BRVO) following vaccination with tozinameran [*dosages and routes not stated*].

Case 1: The 71-year-old woman presented in January 2018 with vision loss affecting her left eye. Further investigations were consistent with inferior temporal BRVO and secondary macular oedema (ME) in her left eye. She received three doses of aflibercept, which resolved her ME. No recurrence was found at the time of follow-up. She had no history of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. She received a second dose of the tozinameran [SARS-CoV-2 mRNA vaccine BNT162b2 (Pfizer-BioNTech)] in July 2021. The next day, she noticed vision loss in her left eye. Her best-corrected visual acuity (BCVA) decreased to 20/30, and her ultra-wide-field pseudo-color (UWPC) and optical coherence tomography (OCT) images revealed superior temporal BRVO and secondary ME in her left eye. The left eye received an additional one-time dose of aflibercept. The BCVA improved to 20/20 and ME resolved. Based on the clinical presentation, it was concluded that the vaccination with tozinameran resulted in exacerbation of BRVO.

Case 2: The 74-year-old man presented in February 2020 with a complaint of vision loss affecting the right eye. Further investigations were consistent with temporal superior BRVO without ME. He was followed without treatment. He had no history of SARS-CoV-2 infection. He received his first dose of the tozinameran [SARS-CoV-2 mRNA vaccine BNT162b2 (Pfizer-BioNTech)] in July 2021. The next day, he noticed vision loss in his right eye and was referred to the hospital. His UWPC and OCT images revealed recurrence of temporal superior BRVO and secondary ME. His BCVA was 20/25. His right eye received two doses of ranibizumab, which resolved the ME. His BCVA was 20/25. Three weeks after the first dose of vaccine, he received the second vaccination dose. He neither experienced any symptoms, nor had any changes in the examination. Based on the clinical presentation, it was concluded that the vaccination with tozinameran resulted in exacerbation BRVO.