A male patient in his late 20s presented with severe pain, photophobia, and visual changes in his left eye for the past 2weeks. His medical history was significant for AIDS, with past infections including syphilis, cytomegalovirus, Pneumocystis jiroveci (formerly Pneumocystis carinii) pneumonia, giardiasis, and condyloma acuminata. In the past year, a diagnosis of mpox was treated with tecovirimat over 24 days (10 days intravenously and 14 days orally). The patient’s symptoms improved while taking treatment. One month post therapy, the patient noted recurrence of the prior skin lesion and left eye symptoms and a new 2-cm ulcerated forehead lesion. Results of the forehead lesion swab polymerase chain reaction were positive for Orthopoxvirus.

Initial ophthalmic evaluation was significant for severe hyperemia of the left eye with demarcation lines suggestive of necrosis. The patient had severe pain in the left eye, and visual acuity was counting fingers OS. CD4 lymphocyte count was 12 cells/uL at the time of admission. A full-thickness conjunctival biopsy was performed due to the pro-found CD4 lymphopenia necessitating exclusion of opportunistic infections and potential concerns regarding medication compliance for HIV and mpox infections.

On hematoxylin-eosin staining, the inferior conjunctival sample showed acute conjunctivitis with subconjunctival edema and hemorrhage, mild acute neutrophilic infiltrates throughout the conjunctiva, and mild perivascular lymphoplastic infiltrate. The superior conjunctival sample showed acute ulcerative conjunctivitis with necrosis and exudate, karyorrhectic neutrophilic debris, rare eosinophilic glassy nuclear pseudoinclusions, and mixed acute and chronic infiltrate and subconjunctival edema. There were no cytoplasmic inclusions visible on hematoxylin-eosin stains. Results of immunohistochemical testing were positive for Orthopoxvirus antigen in the cytoplasm of cells in the ulcerated area, and electron microscopy demonstrated viral particles in the cytoplasm with none in the nucleus, typical of orthopox virus species.