

Letter to Editor

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A commentary on “adenovirus-associated uveitis with necrotizing retinitis”

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There is an association between human adenovirus and uveitis, especially among the pathogenesis of uveitis, viral infection is an important contributing factor [1]. The occurrence of uveitis is related with many factors, including infection, auto-immune diseases, inflammatory spread of adjacent tissues, drug side effects, etc. Human adenovirus is a common virus that can cause a variety of diseases, including respiratory infections, conjunctivitis, gastrointestinal discomfort. After adenovirus infection, fever, cough, sore throat and other symptoms usually occur. During eye infection, it may show conjunctival congestion, tears and pain.

Infectious factors in uveitis include infections by viruses, bacteria, and pathogens such as fungi. Among them, adenovirus, as a common virus, may cause acute anterior uveitis when it infects the eye. In addition, adenovirus may also form uveitis by hematogenous dissemination to the eye, causing endogenous infection. The pathogenesis of uveitis is complex and involves multiple factors. Among the infectious factors, viral infection is an important contributing factor to [2,3]. As a common adenovirus virus, its infection may lead to the development of uveitis.

In addition, adenovirus infection may also cause the body's immune response, further aggravating the condition of uveitis.

We note that in the case of uveitis, although the herpes virus is widely recognized as the main infectious pathogen, the etiology of some cases is not yet clear. The two reported cases of uveitis associated with HAdV infection, this finding may provide new insight into our understanding of the etiology of uveitis. By sequencing some or all of the HAdV genome in a patient with Acquired Immunodeficiency Syndrome (AIDS) and another hematological malignancy, the new types of HAdV, infection and the unreported type of [4,5] for HAdV were identified. This report suggests that HAdV may be a cause of uveitis with retinal necrosis and also suggests us that some cases of uveitis classified as “idiopathic” in the past may in fact be caused by HAdV infection. This new understanding may have a major impact on the diagnosis and treatment strategy of uveitis.

Although previous studies have a clear understanding of the etiology of uveitis, we know that there are many unknown areas waiting to explore the etiology of uveitis, especially the relationship with HAdV. There may be other viral causes of retinitis, which requires our further study and exploration.

Declarations

Ethics approval: The study was approved by the ethics committee of Xiamen Pediatric Hospital affiliated with Fudan University, Xiamen, China (approval no: XEKLS [2022]38).

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Author contributions: ZF, YL designed the study and drafted the manuscript; ZF, YL collected the data; ZF, YL performed literature searches and analyses; and ZF, YL critically reviewed and revised the manuscript. All the authors have read and approved the final manuscript.

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