

Is It Possible to Detect the Presence of Adenovirus Antigen in Conjunctiva Before the Onset of Conjunctivitis?

Ryoji KIMURA¹⁾, Eiichi UCHIO¹⁾, Kazuaki KADONOSONO²⁾,
Shigeaki OHNO³⁾ and Koki AOKI³⁾

¹⁾ *Department of Ophthalmology, Fukuoka University School of Medicine, 7-45-1 Nanakuma, Jonan-ku, Fukuoka 814-0180, Japan*

²⁾ *Department of Ophthalmology, Yokohama City University Medical Center, 4-57 Urafune-cho, Minami-ku, Yokohama 232-0024, Japan*

³⁾ *Department of Ophthalmology, Hokkaido University Graduate School of Medicine, 14 Jo Kita, 5 Nishi, Kita-ku, Sapporo 060-0814, Japan*

Abstract : Background : The presence of adenovirus (Ad) in the conjunctiva was analyzed to investigate the potential of the eye in the incubation period as a source for spreading infection. Materials and Methods : Conjunctival scrapings obtained from the first infected eye and the second eye before and after the onset were evaluated by an immunochromatography test and the polymerase chain reaction method to detect Ad antigen. Results : Although bilateral cases were observed in 72%, no specimens obtained before the onset showed a positive result for Ad in both tests. Conclusion : These results suggest the possibility of the eye in incubation period as being a source for spreading infection is considered to be very small.

Key words : Adenovirus, Conjunctivitis, Incubation period, PCR