

## 福井県衛生環境研究センター活動報告 概要

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| 発表演題名 | Surveillance of Adenovirus D in Patients with Epidemic Keratoconjunctivitis from Fukui Prefecture, Japan, 1995-2010   |
| 発表雑誌名 | Journal of Medical Virology   |
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| 発表日時  | 平成 23 年 9 月   |
| 発表内容  | <p>Human adenoviruses species D (HAdV-D) are known to cause severe epidemic keratoconjunctivitis. However, the isolation rate of HAdV-D is not high, because HAdV-D is usually slow to propagate. Although new types of HAdV-D have been reported, accurate surveillance has not been performed because of difficulties in culturing the viruses and lack of a practical identification method.</p> <p>In this study, HAdV-Ds were detected and identified from patients with epidemic keratoconjunctivitis in Fukui Prefecture during 1995-2010 by PCR, loop-mediated isothermal amplification (LAMP) of DNA, and conventional virus isolation and neutralization tests.</p> <p>All samples were subjected to culture and PCR and LAMP. A total of 124 strains of HAdV-D were detected from 157 patients with epidemic keratoconjunctivitis. The strains consisted of the following types: D8 (n = 8), D19 (n = 4), D37 (n = 40), D53 (n = 5), D54 (n = 66), and D56 (n = 1). Among these, D53, D54, and D56 are new types that have been recently reported.</p> <p>The results of this study demonstrated that new types of HAdV-D caused epidemic keratoconjunctivitis during 1995-2010, and included an outbreak of keratoconjunctivitis caused by HAdV-D54. The LAMP method was able to detect and identify HAdV-D53 and HAdV-D54 in one hour, and may therefore be applicable for use at the bedside.</p> |