AN OUTBREAK OF HAND, FOOT, AND MOUTH DISEASE CAUSED BY COXSACKIEVIRUS A16 IN A KINDERGARTEN

Jinhui Zhao, Beijing Municipal Center for Disease Control and Prevention, Beijing, China
Xiaohong Jiang, Beijing Chao Yang Center for Disease Control and Prevention, Beijing, China
Jianxin Ma, Beijing Chao Yang Center for Disease Control and Prevention, Beijing, China
Lijie Zhang, Chinese Center for Disease Control, Beijing, China
Huilai Ma, Chinese Center for Disease Control, Beijing, China

Background and Aims: Hand, foot, and mouth disease (HFMD) is a common viral illness of infants and children. HFMD outbreaks occur regularly in the spring and summer in China. On March 9, we found 4 HFMD cases during 3 days in a class of one kindergarten from surveillance network in Beijing, China. To develop control measures, we began an investigation to identify the cause of the outbreak.

Methods: We searched cases by following-up the children's health through telephone from February 28 to March 12. We interviewed with health doctor and class teacher to know living activities of children. We search attendance records of the children. A retrospective cohort study was used to identify exposure factors.

Results: From February 28 to March 12, 73% (16) of 22 children developed a case in the kindergarten. The incidence rate of boys is 2.5 times of the girls (95% CI: 1.17-5.34). The incidence rate of block A is 2.2 times of the non-block A (95% CI: 1.15-4.20). The stool of cases were still contained coxsackievirus A16 virus when cases were ill after 3-5 weeks, 85% (11) of 13 case specimen was positive. The risk of children who need to be reminded washing their hands was 2.29 times the children who do not have to remind (1.05-4.98).

Conclusions: Coxsackievirus A16 virus caused the outbreak in a kindergarten through close contact between Children. Parents of infants and young children should prepare plastic bags to prevent the environment contamination caused by fecal when they go out.

References: