

Laboratory and Epidemiology Communications

First Isolation of Influenza B Virus in Kawasaki City, Kanagawa Prefecture, Japan in the 2005 - 2006 Season

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The patient was a 69-year-old woman who had no history of foreign travel. She had no influenza vaccination history. She developed symptoms of high fever (39°C), arthritic pain, muscular pain and appetite loss on December 12, 2005. A throat swab specimen was obtained on December 13. This specimen tested positive for influenza B virus using a commercial diagnostic kit (Fujirebio Inc., Tokyo, Japan). The specimen was inoculated onto MDCK cells, and cytopathogenic effect appeared in 3 days. The culture supernatant fluid was examined by HA test with 0.75% human O type red blood cells. HA titer was 256, suggesting the presence of influenza virus. The culture supernatant was also tested by the influenza HI test kit distributed by the National Institute of Infectious

Diseases, Japan. HI titers were 5,120 with antiserum to B/Brisbane/32/2002, 20 with antiserum to B/Shanghai/361/2002, <10 with antiserum to A/New Caledonia/20/99, and <10 with antiserum to A/New York/55/2004 (Table 1). The sample was also examined by HI test using a commercial chicken antisera (Denka Seiken Co., Tokyo, Japan). HI titers were 20 with antiserum to B/Shangdong /07/97 and <10 with antiserum to B/Shanghai /361/2002. These results indicate that the isolate virus was influenza B virus of the Victoria lineage.

The first isolates of influenza A/H3N2 and A/H1N1 viruses were obtained on November 15, 2005 and November 28, 2005, respectively, in Kawasaki City. It was thus confirmed that influenza B co-circulated with A/H3N2 and A/H1N1 viruses during this season. This was the first influenza B virus isolate in Kawasaki City, Japan in the 2005-2006 season, and the first since the 2002-2003.

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Table 1. Results of HI test of the isolated virus

Viruses	HI titers			
	Antisera to			
	B/Brisbane/32/2002	B/Shanghai/361/2002	A/New Caledonia/20/99	A/New York/55/2004
B/Brisbane/32/2002	5,120	<10	<10	<10
B/Shanghai/361/2002	1,280	1,280	<10	<10
A/New Caledonia/20/99	<10	<10	1,280	<10
A/New York/55/2004	<10	<10	<10	2,560
Isolated virus	5,120	20	<10	<10

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