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= Abstract =

## Epidemics of Lower Respiratory Tract Infection that Occurred to Children at a Local Institute for Children's Adoption and Welfare

Mi Hwa Yang, M.D., Chan Sook Park, M.D., So Young Yoon, M.D. Jae Youn Kim, M.D. and Don Hee Ahn, M.D.

Department of Pediatrics, National Medical Center, Seoul, Korea

**Purpose:** We analyzed clinical features and causal viruses of acute lower respiratory tract infections(LRTIs) in order to improve the management of these infections.

**Methods:** From end of April to early May 2001, amongst 30 children at a local institute for children's adoption and welfare, 13 were admitted to the hospital with the diagnostic impression of acute LRTIs. Nasopharyngeal aspirates were sent in Seoul National University Hospital for viral culture of respiratory syncytial virus(RSV), adenovirus, parainfluenza virus.

**Results:** One or more viral agents were identified in 4 cases(30.7%): were RSV(15.4%), adenovirus(7.7%), and a mix of these two viruses(7.7%). Initial symptoms were fever(69%), cough(100%), tachypnea(54%), chest retraction(69%), rale(85%) and wheezing(15%). Leukocytosis was noted in 23%, CRP increased more than 10 mg/L in 46%. Chest X-ray abnormalities were 69%.

**Conclusion:** Although viruses were identified in 30.7%, further studies should be made for prevention and treatment of acute viral LRTIs.

**Key Words:** Epidemics, Acute lower respiratory infections, Children living in institute of adoption and welfare

15~25% 1-3).

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20~30% 4,5).
,
(croup), (treacheobronchitis),

\* 2001 , , , , . . .

Tel: 02)2260-7305, Fax: 02)2267-7301

E-mail: dkhs1968@medigate.net

respiratory syncytial

virus( RSV), adenovirus, parainfluenza virus, influenza virus .

20~50% 7\( \)

6,7), 7\( \)

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1.
2001 4 5 15

30
13 7t 9, 7t 4
28

2.1), RSV, adenovirus, parainfluenza virus

. 2) HEp-2 (hu-

HEp2 . 10
, (RSV, parainfluenza virus, adenovirus, influenza A, B) , 37°C
30 , phosphate buffered saline(PBS) 10 3 .

, (FITC) 37°C 30 , PBS 3)

, , ,

1.

13 4 (30.7%) 7\\
. RSV 2 (15.4%), adenovirus

1 (7.7%), RSV adenovirus

1 (7.7%) , parainfluenza virus

, 9 (69.2%) 7\\
(Fig. 1).

2.

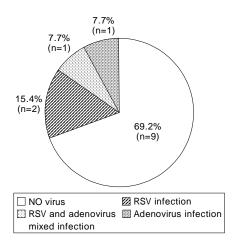


Fig. 1. Isolation rates of viruses.

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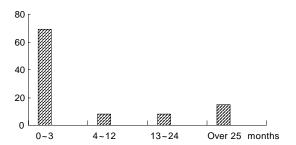


Fig. 2. Distribution of age.

69%, 100%, 54%, 69%, 85%, 15% (Table 1).

4.

フト 、 3 フト フト . CRP フト 10 mg/L 6 CRP フト , 9 (Table 2).

6.1)3 ,5 ,

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Table 1. Initial Symptoms and Signs

Symptoms and signs	No. of cases(%)
Fever	9/13( 69%)
Cough	13/13(100%)
Tachypnea	7/13( 54%)
Chest wall retraction	9/13( 69%)
Rale	11/13( 85%)
Wheezing	2/13( 15%)

Table 2. Laboratory Findings

	No. of cases(%)
Increased WBC	3/13(23%)
Increased CRP(>10 mg/L)	6/13(46%)
Abnormal radiologic findings	9/13(69%)

2)

5 1,000 99%가

99%가 , 70%가 200 가 <sup>8)</sup>. 가 , 가

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                                                                     . Influenza virus
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                                               RSV,
adenovirus, parainfluenza virus, influenza virus
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                           13~15)
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                 <sup>16, 17)</sup>. RSV
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                                  17)
                                                         8, 24, 25)
             16) Van Woensel
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                  RSV
                                             cortico-
                                                                                              8), Jaye
                                                           가
steroid가
                                , RSV
                                            6~8
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                                                                             (CRP),
                                                                                                       (ESR),
corticosteroid
                                      <sup>18)</sup>. RSV
                                                                                         . C-
                       가,
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           5
                                                               20 mg/L
       2
                  3
                                             40%
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virus가
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amoxicillin/clav	ulanic acid, cefac	lor, cefuroxii	ne axe-						
til, erythromyci	n 10								
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	31, 32)	,		%), RS		novirus		1	(7.7%)
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		34)		(15%	) .				
				5)			3%), C-		6 (46
	33)			%)		フ	ŀ	,	
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