

가 가 3

Three Cases of Pulmonary Paragonimiasis in a Family after Ingestion of Raw Fresh-water Crayfishes caught in a Stream of Wolchulmountain

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Human infection with the lung fluke *Paragonimus westermani* has become rare in Korea. Human paragonimiasis is caused by eating raw fresh-water crayfishes or crabs infected with larval metacercariae. Recently, we experienced three cases of pulmonary paragonimiasis in a family. They ate raw fresh-water crayfishes that lived in a stream in Wolchulmountain. All the patients had hypereosinophilia and pulmonary infiltrates with pleural effusion or hydro-pneumothorax, which did not improve on antibiotics. Ingestion of raw crayfishes was a clue for paragonimiasis. Positive results were shown both on intradermal skin test and ELISA for *Paragonimus westermani* specific IgG. After treatment with praziquantel, the patients showed an improvement. This is the first familial human paragonimiasis, reported from Wolchulmountain in Chonnam Province where there had been no previous cases of paragonimiasis.

Key Words : Pulmonary paragonimiasis, Human

3 , 4) 5)
2 가 .
(*Paragonimus westermani*)
, 가
, 가
1980 1), 2) 3)
, , , , , , , ,
가

6. , (2)

가
가 , (3) 가

(enzyme-linked immunosorbent assay, ELISA) 가 가 (Table 1)

가 : 39℃, 158 /
100/60 mmHg, 37 /
21 kg(50~75)

가 가

1 : 〇〇, 7 , 10.3 g/dL, 32.3%, 29,460/
:5 , mm³(28%, 7%, 7%,
58%), 478,000/mm³
가 : 17,600/mm³ 58 mm/hr, C-
가 1 2 . 7.8 g/dL(
3.3 g/dL), ALT/AST 21/22 IU/L

가 IgE 가 가 1 :
3 , 640 1 : 64
가 30 IgE 459.2 IU/mL 가
64,000/mm³(80%)
, 가 , pH 8.5, 5.0 g/dL, LDH 1,754 IU/L
가 가
가

Table 1. *Paragonimus westermani*-Specific IgG Antibody Levels in Sera from Three Pulmonary Paragonimiasis Cases Tested by ELISA

Antigens	Absorbance in				
	Case 1	Case 2	Case 3	Sister	Positive criterion
<i>Paragonimus</i>	0.42	0.84	0.84	0.06	>0.35
<i>Clonorchis sinensis</i>	0.15	0.50	0.37	0.05	>0.30

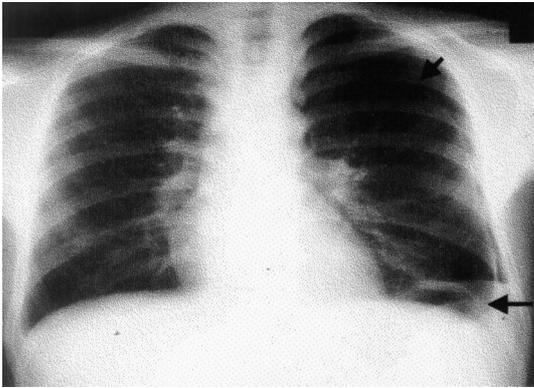


Fig. 2. Chest PA shows left hydropneumothorax in case 2.

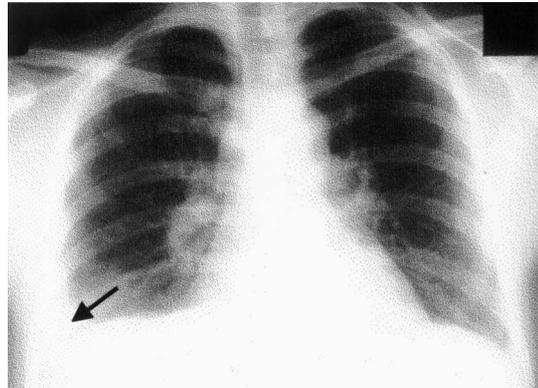


Fig. 3. Chest PA shows right pleural effusion in case 3.

3 2
 X-
 가 IgE 가
 3
 : ○○, 43 ,
 : 1
 :
 가
 3~4 cm
 2 가
 1
 : 10,180/mm³(
 70%), IgE 3,506 IU/mL 가
 /
 가 175/90 mm²
 가가 0.84(Table 1)
 : X-
 (Fig. 3)가
 : praziquantel
 X- 가
 IgE 가
 2

Paragonimus westermani
 가
 , 가
 가
 7). Paragonimus
 가
Paragonimus westermani
 가
 , , ,
 1929 Kobayashi가
 7.9%가
 1958 Chyu Walton 6.7%
 가 15.5% 가
 8). 1959
 12.6%
 (, ,)가
 3% 가 , (,),
 (,), (, ,),
 (, ,), (,)가
 4~5% ()가 9%, 가 16
 %, 가 47%

(22.6%) (6.1%), (17.1%), 가
⁶⁾. 1964 가
¹¹⁾. 가
 3~4 .
 (50.1%) 가 60%
⁹⁾. 1985
¹⁰⁾. ¹²⁾.
 가 , , ,
 , , ,
 2 가 1 가 가
 , 2 , 가 .
 1 , , ,
 (miracidium) , , ,
 (cercaria) . , , ,
 2 가 가 가 ,
 ,
 (metacercaria) 가
 가 ,
 가 ⁷⁾.
 1982
 1 , 1983
 1 , 1985
 2
 1 , 1988
 가
 1 , 1993
 1 , 1999 1
 , 가 1982 1 가
 , . 가
 1~5, 13, 14) . 가
 .
⁷⁾.
 가 , , ,
 . 가
 1 ~ 3 cm
 6 (1~27) , , ,

7 : 가 가 3 227

7)

7)

가

11, 15)

가

16)

11)

2

12)

6

가 60 mm²

가

가

5

10~20

가

가

가

가

가

500/mm³

80,000/

mm³

가

25%

가

가

17)

가

7)

가

IgG

0.25

86%,

가

IgE가

100%

가

E

IgG

가

IgG

가,

가

, LDH 가

pH

가

2,000/mm³

가

가 4~18

가

3

7, 18)

19)

8

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