. 김휘종 1 , 김현 4^2 , 마정은 2 , 이승준 2 , 함현 4^2 , 조유지 2 , 정이영 2 , 전경녀 3 , 김호철 2 , 이종덕 2 , 황영실 2

Clinical Characteristics of Endobronchial Tuberculosis that Develops in Patients over 70 Years of Age

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Background: The possibility of developing pulmonary tuberculosis usually increases with increasing age. Therefore, the incidence of endobronchial tuberculosis in older people may increase. We evaluated the clinical characteristics in patients with endobronchial tuberculosis above the age of 70 years.

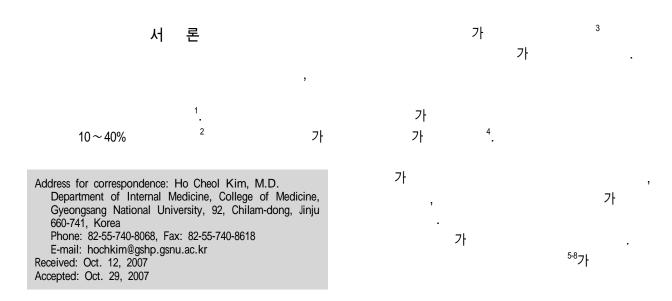
Methods: We enrolled 74 patients (12 males and 62 females; mean age 64.6±16.2 years) that were diagnosed with endobronchial tuberculosis from March 2003 to July 2006 at Gyeongsang University Hospital. We retrospectively evaluated the clinical characteristics of endobronchial tuberculosis for patients 70 years or older (older group) and for patients below the age of 70 years (younger group).

Results: The number of patients in the older group was 41 (55%). Cough was the most common symptom in the two groups of patients and dyspnea on exertion was more common in the older group of patients than in the younger group of patients (31.7% vs. 12.1%). The actively caesating type of disease was more common in the younger group of patients than in the older group of patients (66.7% vs. 39%). The edematous type of disease was more common in the older group of patients than in the younger group of patients (53.7% vs. 27.2%) (p<0.05). Tracheal and main bronchial involvement of lesions were more common for the younger group of patients than for the older group of patients (30.3% vs. 9.7%) (p<0.05).

Conclusion: Endobronchial tuberculosis was commonly observed in patients older than 70 years and this group of patients had some clinical characteristics that were different from the younger group of patients. *(Tuberc Respir Dis 2007;63:412-416)*

Key Words: Endobronchial tuberculosis, Older people, Clinical characteristics

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9-11 70 SPSS 10.0 version chi-square test t-, p 0.05 대상 및 방법 결 과 2003 3 2006 6 12 , 74 74 62 . 70 70 64.6±16.2 가 . 60 70 56 76% 41 (55%) (Table 1). 가 70 가 (Table 2). 가 (Table 3). 70 1,2 22 (66.7%) 70 16 (39.0%) 7가 70 70 22 (53.7%) 9 (27.2%) (Table 4). 70

Table 1. Age distribution

Age	Male	Female	Total (%)
<20	1	0	1 (1.4)
20~	0	4	4 (5.4)
30~	0	4	4 (5.4)
40~	2	1	3 (4.2)
50~	3	3	6 (8.1)
60∼	2	13	15 (20.2)
70~	3	32	35 (47.2)
>80	1	5	6 (8.1)
Total	12	62	74 (100)

Table 2. The clinical manifestation

Symptoms and signs	Age < 70 (n, %)	Age≥70 (n, %)
Cough	20 (60.6)	21 (51.2)
Sputum	12 (36.4)	10 (24.4)
Dyspnea	4 (12.1)	13 (31.7)*
Hemoptysis	3 (9.1)	4 (9.8)
Weakness	2 (6.1)	2 (4.9)
Fever	1 (3)	0 (0)
Hoarseness	1 (3)	0 (0)

^{*}p < 0.05 compared with age < 70.

Table 3. The radiologic finding

3 (9.1%)

Chest X-ray findings	Age < 70 (n, %)	Age≥70 (n, %)
Infiltration	22 (66.7)	25 (61.0)
Atelectasis	7 (21.2)	15 (36.6)
Fibrostreaky	4 (12.1)	4 (9.5)
Mass shadow	1 (3)	5 (11.9)
Effusion	1 (3)	1 (2.4)
Cavity	0 (0)	2 (4.8)
Normal	1 (3)	1 (2.4)

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Table 4. The classification of endobronchial tuberculosis according to Jung's criteria

EBTB classification	Age < 70 (n, %)	Age≥70 (n, %)
Active caseating Edematous hyperemic Tumorous	22 (66.7) 9 (27.2) 2 (6.1)	16 (39.0)* 22 (53.7)* 2 (4.9)
Ulcerative	0	1 (2.4)

^{*}p < 0.05 compared with age < 70.

Table 5. The location of involved lesion

Location of lesion	Age < 70 (n, %)	Age≥70 (n, %)
Trachea	3 (9.1)	0*
Rt. Main bronchus	3 (9.1)	2 (4.8)
RUL bronchus	11 (33.3)	8 (19.5)
RML bronchus	9 (27.3)	17 (40.5)
RLL bronchus	3 (9.1)	7 (16.7)
Lt. main bronchus	4 (12.1)	2 (4.8)
LUL bronchus	5 (15.2)	10 (23.8)
Lingular bronchus	1 (3.0)	4 (9.5)
LLL bronchus	3 (9.1)	1 (2.4)
Tachea+Rt. main +Lt. main bronchus	10 (30.3)	4 (9.7%)*

^{*}p<0.05 compared with age<70.

Table 6. The positive yield of diagnostic tests

Diagnostic tests	Age < 70 (n, %)	Age≥70 (n, %)
Sputum AFB smear Sputum AFB culture	17 (68.0) 16 (80.0)	19 (54.3) 17 (58.6)
Bronchoscopic washing AFB stain	14 (43.8)	18 (43.9)
Bronchoscopic washing AFB culture	24 (77.4)	26 (63.4)
Biopsy	26 (89.7)	32 (80.0)

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(Table 6, 7).

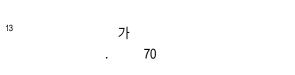


Table 7. The parechymal involvement of endobronchial tuberculosis

Pulmonary TB	Age < 70 (n, %)	Age≥70 (n, %)
(+)	25 (75.8)	29 (70.7)
(-)	8 (24.2)	13 (29.3)

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70 70 가 31 22.6% 74.2% 26 18 70 70 가 가 가 가 가가 요 약 가 연구배경: 가 가 가 70 법: 2003 3 2006 6 74 (70 =12:62, : 64.6±16.2) 70 결 과: 1) 70 (55%), 70 가 33 (45%) . 2) 70

(31.7% vs. 12.1%). 3)

70

(39% vs.

(53.7% vs.

70

66.7%),

70

27.2%)(p < 0.05). 4) 가 70 70 (9.7% vs. 30.3%). 5)

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