



1

2 2 3

1

가

1885

Paltauf (1) 가 (Fig. 1B, C).

(2-6).

가

1 Amphotericine B 19

(pneumonectomy)

76 가 20

2

2 (Fig. 1D).

가

177mg/dl, 2 393mg/dl, HbA1C

가 12.9%

30cc

(Fig. 1A).

3

Zygomycetes Mucorales

(acido-

sis), , deferoxamine (7).

1 (rhinocerebral), (pulmonary),

2 (abdominopelvic), (cutaneous), (disseminated),

3 (miscellaneous) 가 (8).

30%

(7,9).

Absidia, Rhizopus, Mucor, Cunninghamella
가 (2).

(89%)

(2, 3).

가

(9).

(3),

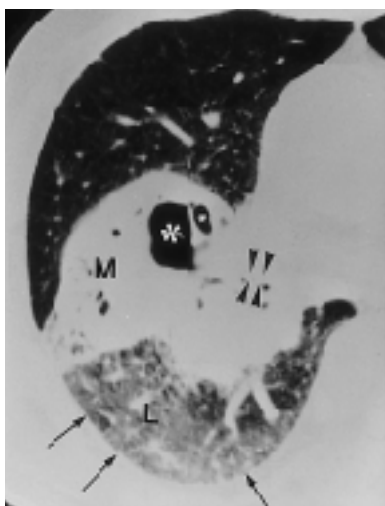
(air-crescent sign)



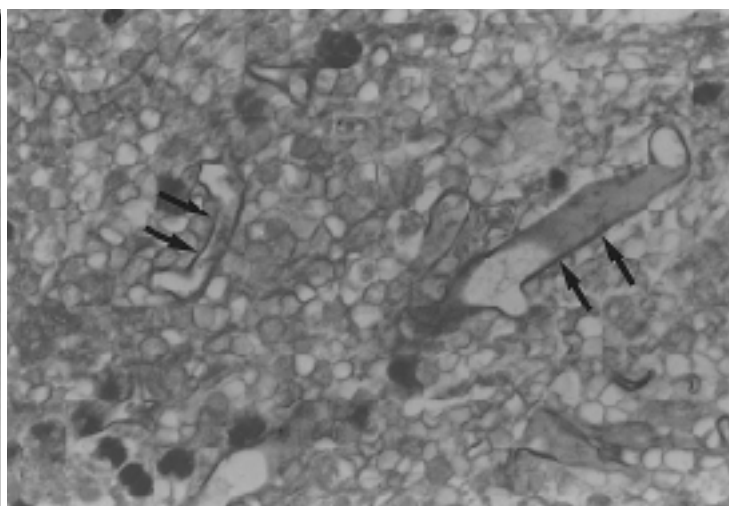
A



B



C



D

Fig. 1. A. Initial chest radiograph shows consolidation in right lower lung zone.

B. Chest CT scan (mediastinal window) shows consolidation with multiple cavities (white arrows) in right middle lobe and low attenuation endobronchial mass in bronchus intermedius (arrowheads).

C. Chest CT scan (lung window) shows areas of consolidation with cavities (asterisks) and air-bronchograms in right middle (M) and lower lobe (L). Large areas of ground-glass opacity are also observed in right lower lobe (arrows). Right truncus basalis (arrowheads) is occluded by an endobronchial mass.

D. Photomicrograph of endobronchial lesion in bronchus intermedius shows non-septated broad hyphae with right angle branching (arrows) (PAS stain, $\times 400$).

가 (3, 10).

(2-6). Bigby (2)

11 9

(4). McAdams (3)

32 1

6

CT

(3-6).

(2,3).

가

amphotericin B

가 (2, 3).

1. Paltauf A. Mycosis mucorina: ein beitrage zur kenntniss der menschlichen fadenpilzkrankungen. *Virchow's Arch Path Anat* 1885;102:543
2. Bigby TD, Serota ML, Tierney LM, et al. Clinical spectrum of pulmonary mucormycosis. *Chest* 1986;89:435-439
3. McAdams HP, Rosado-de-Christenson M, Strollo DC, Patz EF Jr. Pulmonary mucormycosis: radiologic finding in 32 cases. *AJR* 1997;168:1541-1548
4. Murray HW. Pulmonary mucormycosis with massive fatal hemoptysis. *Chest* 1975;68:65-68
5. Husari AW, Jensen WA, Kirsch CM, et al. Pulmonary mucormycosis presenting as an endobronchial lesion. *Chest* 1994;106:1889-1891
6. Kim KH, Choi YW, Jeon SC, et al. Mucormycosis of the central airways: CT findings in three patients. *J Thorac Imaging* 1999;14:210-214
7. Parfrey NA. Improved diagnosis and prognosis of mucormycosis: a clinicopathologic study of 33 cases. *Medicine* 1983;65:113-123
8. Rinaldi MG. Zygomycosis. *Infect Dis Clin North Am* 1989; 3:19-41
9. Chandler FW, Watts JC. *Fungal infections*. In Dail DH, Hammer SP. *Pulmonary pathology*. New York : Springer-Verlag, 1988:228-231
10. Kim Y, Lee KS, Jung KJ, et al. Halo sign on high resolution CT: finding in spectrum of pulmonary disease with pathologic correlation. *J Comput Assist Tomogr* 1999;23:622-626

Pulmonary and Endobronchial Mucormycosis in a Diabetic Patient : A Case Report¹

Jung Eun Kim, M.D., Yookyung Kim, M.D., Heasoo Koo, M.D.²,
Ho Jung Kim, M.D.², Soo Seung Choi, M.D.³

¹*Department of Radiology, College of Medicine, Ewha Womans University*

²*Department of Pathology, College of Medicine, Ewha Womans University*

³*Department of Thoracic Surgery, College of Medicine, Ewha Womans University*

Pulmonary mucormycosis is an opportunistic infection manifested by a fatal angioinvasive fungal pneumonia in immunocompromised patients or those suffering from uncontrolled diabetes. The radiologic findings are nonspecific, but there have been several reports of cases of pulmonary mucormycosis in which characteristic endobronchial lesions were present, with a more indolent clinical course in diabetic patients. We describe a case of pulmonary mucormycosis in a diabetic patient in whom endobronchial involvement was apparent.

Index words : Lung, infection
Mucormycosis
Bronchi, CT

Address reprint requests to : Yookyung Kim, M.D., Department of Diagnostic Radiology, Ewha Womans University Hospital
#70, Chongno-6ka, Chongno-gu, Seoul 110-126, Korea.
Tel. 82-2-760-5144 Fax. 82-2-760-5046 E-mail: yookkim@unitel.co.kr