

진균성 부비동염의 임상적 고찰

전경명 · 박중환 · 이일우 · 노환중

Clinical Analysis of Fungal Sinusitis

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- ABSTRACT -

Background and Objectives : In recent years there has been an increase in mycotic infections of the nose and paranasal sinuses with frequent use of antibiotics, cytotoxic drugs, immuosuppressive therapy and increased survival of chronically debilitated patients. Diagnosis of mycotic sinusitis has advanced markedly with availability of computed tomography, magnetic resonance imaging and sinus endoscopy. The pathophysiology and clinical features of mycotic sinusitis are different according to invasive and non-invasive forms. This study were performed to evaluate 22 cases of mycotic sinusitis with their clinical presentation, course, diagnostic and treatment methods. **Materials and Methods** : Twenty-two cases of mycotic infections of the paranasal sinuses, which were confirmed histopathologiclly, from June 1996 through December 1999 were evaluated retrospectively depending on histopathology, clinical courses, diagnostic findings, and treatment results. **Results** : Of 22 cases 13 cases were non-invasive mycetoma and 11 cases were managed with endoscopic sinus surgery and 2 cases with Caldwell-Luc's operation. Recurrences were not observed. Three cases with fulminant mycotic sinusitis were treated necrotomy and systemic amphotericin B injection. Three cases thought to be allergic fungal sinusitis showed positive allergic mucin and hyphae even though negative IgE-mediated atopy. **Conclusion** : Mycotic sinusitis should always be considered in the differential diagnosis of chronic or recurring sinusitis resistant to adequate medical treatment. Although definite diagnosis of mycotic sinusitis is based on histopathologic examination of removed materials from sinus, CT and MRI are highly sensitive diagnostic tools for evaluating this disease with diagnostic criteria. (**J Clinical Otolaryngol 2000;11:286-292**)

KEY WORDS : Mycotic sinusitis · Aspergillosis · Mucormycosis.

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결 과

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성별 및 연령분포

가 13 (59%), 가 9 (41%) 39 76

1997 1 1999 12 56.5 (Table 1). 22

증상 및 징후

16 , 15 , 5 , 2 , 2 , 3 , 2 , 3 , 1 , 1 , 1 . 3 1

연구대상 및 방법

1997 1 1999 12 22

원인균과 치료

16 (72.7%), 5 (22.7%), 가 1 (4.5%) 13 11 , 2 16 2 Caldwell - Luc 14 3 3 3 5 3 Periodic - Acid - Schiff 6 . 가 amphotericin B Charcot - Leyden crystal , 1 1 IgE , 1 4 방사선학적 소견 Water X -

14 (magnetic resonance imaging) 4 weighted imaging) (low signal intensity) T2- (T2-weighted imaging) 가 (signal void) (peripheral high signal) 가 5 (Fig. 3). (25%), 가 1 (6.3%) . 유발인자 (Fig. 1). (calcification) 5 (22%), 11 (79%), 9 (64%), 4 (18%), 2 (9%) . 7 (50%) (Fig. 2). 3 (21%) 임상경과 13 (mycetoma) T1- (T1- 1

Table 1. Details of patients

Case	S/A	Fungus	Presenting Sx	Underlying ds.	Treatment
1	M/42	M	NB, R, H	None	ESS
2	F/52	A	NB, R	None	ESS
3	F/68	A	Facial pain, toothache	HT	ESS
4	M/68	A	NB, proptosis, R	None	C-L
5	F/70	M	Facial pain, toothache, R	None	C-L
6	M/70	A	Facial pain, rhinorrhea	DM	C-L
7	M/44	A	NB, R, H	None	ESS
8	M/59	A	NB, R, anosmia	None	ESS
9*	M/39	A	NB, R	None	ESS + steroid
10*	F/47	A	NB, R	Asthma	ESS + steroid
11*	F/52	A	NB, R	Asthma	ESS + steroid
12	F/61	U	NB, facial pain	None	ESS
13	M/64	A	NB, R, H	None	ESS
14	M/41	A	NB, R	None	ESS
15	F/40	A	NB, R	None	ESS
16	F/45	A	Facial pain. NB	None	ESS
17	M/53	A	NB, R	None	ESS
18	M/61	A	NB, R	DM	ESS
19	F/54	A	NB, R	None	ESS
20	M/76	M	Ocular pain, 7th nerve palsy	DM	Amphotericin B + Necrotomy
21*	M/73	M	Proptosis, 3rd, 5th, and 7th nerve palsy	DM, CVA, HT	Amphotericin B
22	M/64	M	Proptosis, 5th, 6th and 7th nerve palsy	DM, HT	Amphotericin B + Necrotomy

ESS : endoscopic sinus surgery, C-L : Caldwell-Luc's operation, DM : diabetes melitus, CVA : cerebro-vascular accident, HT : hypertension NB : nasal blockage, R : rhinorrhea, H : headache, A : Aspergillus, M : Mucoraceae, U : unclassified * : not confirmed Ig E-mediated atopy, evidence of eosinophilic mucin and positive hyphae ** : expired during treatment

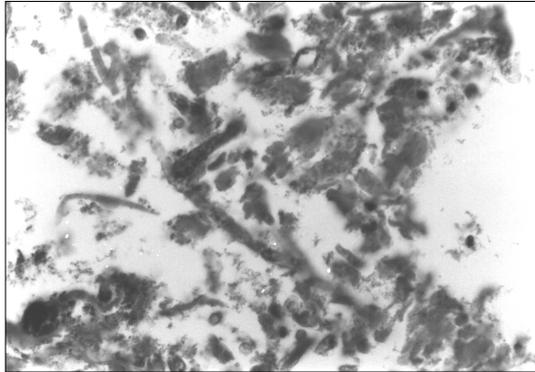


Fig. 4. Mucormycosis : non-septated hyphae (HE x 400).

Table 2. Predisposing factors

Long term antibiotics usage
Indwelling catheter and nasal intubation
Immunosuppressant drugs
Preexistent sinus disease
Metabolic abnormalities
Prolonged hospitalization
Diabetes mellitus
Prolonged neutropenia

Mucoraceae (family) Rhizopus (genus),
 Mucor, Absida, ⁶⁾ Mucoraceae
 (mucormycosis)
 (saprophytes)

(Fig. 4).
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⁵⁾ Mirza ⁷⁾
 Table 2
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 (rhinocerebral mucormycosis)

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¹⁰⁾
 amphotericin - B
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hotericin B
 . Amp -
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 creatinine clearance level
 가 ketoconazole

(allergic mucin)

Chartcot - Leyden
Gomori's methanin silver KOH

중심 단어 :

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Poni -

90%

96%

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, Mabry ¹⁷⁾

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