

## 두개골 기저부를 침범한 악성 외이도염 1례

정명현 · 조성우 · 박준호 · 배정호

## A Case of Malignant External Otitis with Skull Base Extension

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## - ABSTRACT -

Malignant external otitis is a potentially life-threatening infection of the external auditory canal and skull base, typically seen in elderly diabetic or immunocompromised patients. *Pseudomonas aeruginosa* is the bacteria most commonly responsible for the infection. The disease process begins as an external otitis that may progress into an osteomyelitis of the skull base. Cranial nerve palsies may occur as the disease progresses, and in some cases, sigmoid sinus thrombosis and meningitis have resulted in death. Treatment requires intensive long-term antibiotic therapy with routine radiographic evaluations to monitor the disease process. Despite this, resistance to antibiotic therapy can occur, resulting in recurrence of the disease that may be associated with a high in-cidence of mortality.<sup>1)</sup> We have recently experienced one case of malignant external otitis with skull base extension in a 54-year-old male who was treated with open cavity mastoidectomy and long-term antibiotic therapy, and report this case with review of literatures. (**J Clinical Otolaryngol 2000;11:115-119**)

**KEY WORDS** : Malignant external otitis · Facial nerve palsy · Sigmoid sinus thrombosis · Skull base involvement.

## 서 론

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elastase

2)  
(endotoxin)

collagenase,

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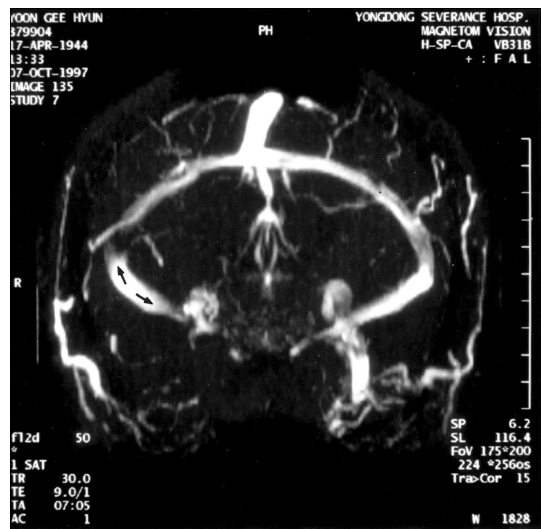
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(Fig. 1).  
 (pseudomonas aeruginosa) methicillin - re -  
 sistant staphylococcus aureus가  
 / 35/17 dB  
 , 1995  
 , 1995 1 가 258 mg/dl , 307 mg/dl  
 가 , ( 100%)  
 4 9 (97. 9. 8)  
 (House - Brackmann grade V)  
 가 . Santorini  
 가 , (stylomastoid foramen)  
 ,  
 (97. 8. 30.)  
 가  
 가  
 Sulperazone 0.5 g q 6 hr, Gentamycin 80  
 mg q 12 hr  
 ,  
 NPH(Neutral Protamine Hagedorn) 28  
 12



**Fig. 1.** Preoperative axial CT scan shows diffuse swelling of external canal wall and narrowing at bony-cartilaginous junction of EAC by soft tissue density (arrow). Mastoid air cells are sclerotic and involvement of surrounding bony structure including skull base is not observed.



**Fig. 2.** MR venogram. The proximal and distal portion of right sigmoid sinus are narrowed by thrombosis

(97. 10. 3). 4  
 (MR venogram) S  
 가 (Fig. 2). coumadine  
 (Sulperazone 0.5 g q  
 6 hr I.V., Gentamycin 80 mg q 12 hr I.V.)  
 가  
 22  
 T1 weighted image  
 fatty marrow가  
 (Fig. 3) S  
 S  
 (Fig. 4).  
 29  
 (WBBS) hot



Fig. 3. Postoperative MRI : T1 weighted enhanced axial view. Low signal intensity was noted at right petrous area and clivus compared to the left side (arrow).

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 uptake ,  
 13 . 30  
 Imipenem 2.0 g q 12 hr, Amikin 250 mg q  
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 (Fig. 2 , 6  
 Ga - 67  
 citrate SPECT (97.12.10) hot up -

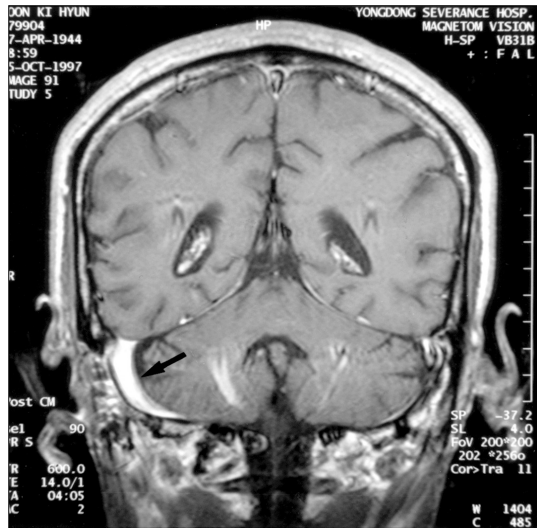


Fig. 4. Postoperative MRI : T1 weighted coronal view. Enhanced high signal density is noted throughout the right sigmoid sinus due to slowing of the blood flow (arrow).

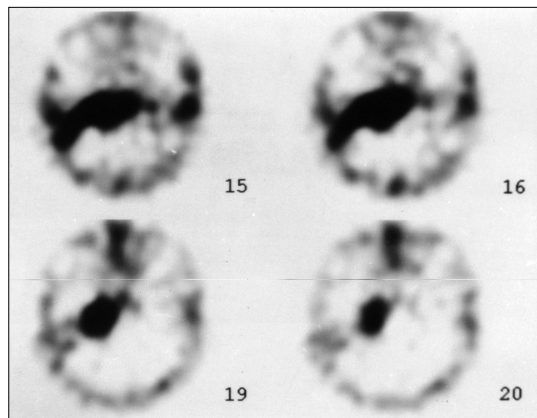


Fig. 5. Galium SPECT shows hot uptakes at right mastoid and petrous area (arrow).

take (Fig. 5).

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Santorini

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ade III ,

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Ga - 67 citrate scan

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Tc - 99 m  
 (WBBS), Ga - 67 citrate SPECT  
 Tc - 99 m scan Ga - 67 citrate scan  
 rdoff<sup>11)</sup> 24 SPECT bone  
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 , Uri <sup>12)</sup> quantitative Tc -  
 99m - MDP bone scan Ga - 67 citrate scintig -  
 raphy가

6 25  
 144 . 4 Pseudom -  
 onas aeruginosa, 2 Staphylococcus aureus, 2

Proteus mirabilis가

1991 Marsot <sup>10)</sup>

20% , Gates

67%,

80%

Genta -  
 mycin, Tobramycin, Amikacin aminoglyco -  
 side Piperacilline, Carbenicillin, Ticarcillin, Me -  
 zlocillin, Azlocillin antipseudomonal penicillin

( 6

) Ceftazidime, Cefoperazone, Cefotaxime, Moxalatom antipseudomonal cephalosporin 가<sup>13)</sup> Cip-rofloxacin 1.5 g 10

10 가<sup>14)</sup> Sulperazone Gentamycin

(97. 11. 3) Imipenem 2.0 g q 12 hours, Amikin 250 mg q 12 hours 8

가 Gilain<sup>3)</sup> , 75 가

11)

Tc - 99 m scintigraphy

Ga - 67 citrate

Ga - 67 scintigraphy

중심 단어 : . S

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