

# 이수부 표피낭종 감염에 대한 임상적 고찰

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## A Clinical Study of Infected Epidermal Cysts on Ear Lobe

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### -ABSTRACT-

**Background and Objectives** : Epidermal cyst is intradermal or subcutaneous sac-like structure which is lined with squamous epithelium containing keratohyalin granules. The incidence of epidermal cysts on ear lobe is increasing due to piercing for earrings. Also infection and inflammation of the cyst is frequently seen. The purpose of this study is to report clinical and microbiological features of infected epidermal cysts on ear lobe and to set a better strategy for preventing recurrent infection and inflammation. **Subjects and Method** : We clinically reviewed 34 cases of infected epidermal cyst on ear lobe in 28 patients that were treated at the national police hospital from August 2001 to August 2004. We described about the frequency of infection, duration of treatment, cultured organisms, antibiotic sensitivity of cultured strains and result of treatment. **Results** : All cases were treated with surgical drainage & antibiotics, and mean period of treatment was 8.6 days. Among 34 cases, 4 strains of aerobic bacteria were isolated in 29 culture-positive cases. Among the cultured organisms, Coagulase-negative staphylococcus was the most common. There was no recurrence after surgical excision. **Conclusion** : Epidermal cyst on ear lobe requires complete surgical excision to prevent repeated infection and inflammation. Cephalosporin or quinolone may be the preferred choice of drug. The role of anaerobes needs further investigation. (J Clinical Otolaryngol 2004;15:256-260)

**KEY WORDS** : Epidermal cyst · Infection · Ear external.

서 론	. <sup>1)2)</sup> (ear lobe)	piercing 가	, <sup>3)</sup> 3
(epidermal cyst)	28		

: 2004 10 17  
: 2004 11 23  
: , 138 - 708 가 58

### 대상과 방법

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28

가 25 , 가 3

34

(Fig. 1).

8

MacConkey

24

48

Streptococcus

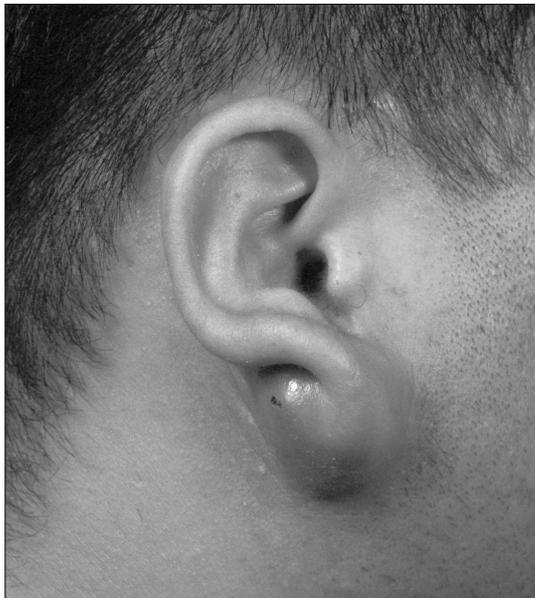
MicroScan

walk away 96SI

penicillin, erythromycin, gentamicin, cephalo-  
thin, ciprofloxacin, vancomycin

가 1~

4



**Fig. 1.** Clinical appearance of an infected epidermal cyst. There is swelling and diffuse erythematous change on right ear lobe.

## 결 과

### 염증의 초발·재발 분포 및 염증의 치료기간

24 (85.8%) , 1  
 2 (7.1%), 2 2 (7.1%)  
 8.6 , 5 가 3  
 (8.8%), 6~10 25 (73.6%), 10~15 3 (8.8%),  
 16 3 (8.8%) (Table 1).

### 원인균 동정

34  
 가 5 , 가  
 26 , 가 3 ,  
 32  
 Coagulase - negative staphylococcus가  
 22 가 , Coagulase - positive staphylococ-  
 - hemolytic streptococcus 4  
 , Enterococcus가 2 (Table 2).  
 가 3 Coagulase - ne-  
 gative staphylococcus Enterococcus, Coagulase -  
 positive staphylococcus Enterococcus, Coagulase -  
 positive staphylococcus - hemolytic streptococcus

**Table 1.** Duration of treatment of inflammation

Days	Cases (%)
5	3 ( 8.8%)
6 - 10	25 (73.6%)
11 - 15	3 ( 8.8%)
16	3 ( 8.8%)
Total	34

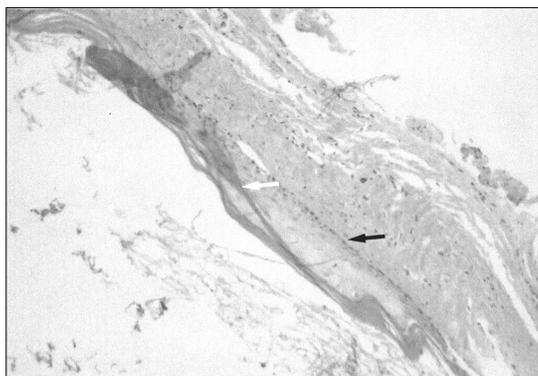
**Table 2.** Number of cases of cultured organism\*

Organisms	No. of cases
Coagulase ( - ) staphylococcus	22
Coagulase ( + ) staphylococcus	4
-hemolytic streptococcus	4
Enterococcus	2
Total	32

\* : Three cases of mixed infection were included

**Table 3.** Antibiotic susceptibility rates of isolated organisms (%)

Organisms	Penicillin	Erythromycin	Gentamicin	Cephalothin	Ciprofloxacin	Vancomycin
Coagulase (-) staphylococcus	5 ( 22.7)	18 ( 81.8)	18 ( 81.8)	12 ( 54.5)	21 ( 95.5)	22 (100)
Coagulase (+) staphylococcus	2 ( 50 )	4 (100 )	3 ( 75 )	4 (100 )	4 (100 )	4 (100)
-hemolytic streptococcus	4 (100 )	4 (100 )	4 (100 )	4 (100 )	4 (100 )	4 (100)
Enterococcus	1 ( 50 )	2 (100 )	2 (100 )	1 ( 50 )	2 (100 )	2 (100)



**Fig. 2.** The histological findings of the epidermal cyst. Cystic wall lined by squamous epithelium (black arrow) and keratin materials (white arrow) without skin appendages (H & E stain × 100).

가

**항생제 감수성 검사**

Coagulase - negative staphylococcus penicillin 22.7%, cephalothin 54.5%, erythromycin 81.8%, ciprofloxacin 95.5%, vancomycin 100%. Coagulase - positive staphylococcus penicillin 50%, gentamicin 75%, -hemolytic streptococcus 100%, Enterococcus penicillin cephalothin 50% 100%

(Table 3).

**치료 및 치료 후 결과**

34

28 가 24 4 1~4

(Fig. 2),

**고 찰**

embryonic cleft

(implantation)

<sup>1)4)</sup> (dermoid

cyst) epidermoid type

cyst) , dermoid type

, teratoid type (teratoma)

<sup>2)</sup>

가

<sup>5)</sup>

Brook<sup>6)</sup> 231

가 , 231 192

가 , 44%,

30%,

가 26% 가

:  
 ciprofloxacin  
 (trichilemmal cyst, pilar cyst)  
 (phagocytosis) (sebaceous cyst) 90%  
 , growth factor , amorphous keratinous material  
 oxidation - reduction potential laminated keratinous ma-  
 가 terial 가 ,  
 6)7) 가  
 가 2)11) 가  
 가 6) - hemolytic streptococcus  
 penicillin  
 , Coagulase - negative staphylococ-  
 cus, Coagulase - positive staphylococcus Enteroco-  
 ccus penicillin  
 penicillin  
 cephalosporine quinolone 가  
 Coagu-  
 lase - negative staphylococcus가 가 Staphy-  
 lococcus aureus  
 Coagulase - negative staphylococcus가 가  
 Staphylococcus aureus가 가  
 Lee 1) Brook 6) 가 .  
 가  
 가  
 Coagulase - negative staphylococ-  
 cus Coagulase - positive staphylococcus  
 . El Alami 13)  
 CO2  
 laser (marsupialization)  
 . Akiyama 9) Coagulase - ne- 28  
 gative staphylococcus가 , Staphylococ- , 4  
 cus aureus methicillin 가 1~4  
 , Kotilainen 10) ciprofloxacin  
 Coagulase - negative staphylococcus  
 Coagulase - negative sta-  
 phylococcus가 Coagulase - positive staphylococcus  
 , 1 가 ,

Coagulase - negative staphylococcus가 가 Coagulase - positive staphylococcus, - hemolytic streptococcus, Enterococcus, penicillin cephalosporin quinolone 가

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