

# 소아 중이염의 진단과 치료

## Management of Otitis Media in Children

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### Abstract

Otitis media is one of the most common diseases during childhood with a peak incidence and prevalence from 6 to 20 months of age. It is the most frequent disease managed with antibiotics in children. The infection typically develops as a result of bacterial contamination through the Eustachian tube in the presence of preexisting inflammation in the middle ear. The optimal method of management remains open to question and is the subject of continuing controversy. Overdiagnosis of the disease and unnecessary prescription of antibiotics for this condition have contributed to the spread of antimicrobial resistance. Thus, the differential diagnosis between acute otitis media and otitis media with effusion is important to determine the management strategy ; whether to use antibiotics and which antibiotics to use when necessary. Otitis media may be accompanied by a variable degree of conductive hearing loss. Both infectious and noninfectious complications of otitis media may result in significant morbidity and complications, including acute and chronic mastoiditis, petrositis, and intracranial infection.

Keywords : **Acute otitis media;**  
**Otitis media with effusion; Children**

, 3  
 .  
 가 .  
 6 가 2 가  
 . 1 50% 가,  
 2 65% 가, 3 75% 가  
 1 , 20%  
 3 (1).  
 가  
 . ,  
 .  
 가  
 , 가 가



1. :



2. :

influenza virus, adenovirus, enterovirus, parainfluenza virus

(2).

(Acute Otitis Media)

가

가

가

( 1)

(bulging)

*Streptococcus pneumoniae*가 *Hemophilus*

*influenzae* *Moraxella catarrhalis*가

- lactamase

가

90%

10%

ampicillin cephalosporin

*H. influenzae* *M. catarrhalis*

가 가

50% 75%

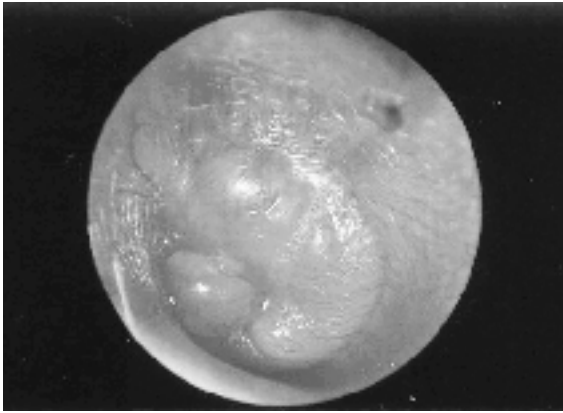
respiratory syncy-

*S. pneumoniae*

tial virus가 50% 가

, rhinovirus,

10~20%



3.

가

가

.

amoxicillin (80~90 mg/

kg/day)

3

,

- lactamase *H. influenzae*

*M. catarrhalis*가 가

가

amoxicillin/clavulanate 90 mg/6.4 mg/kg/day,

cefuroxime axetil 30 mg/kg/day

,

.

meta - analysis (1, 3)

70%

,

15%가

.

24

가

, 1

(cholesteatoma)

2~7 , ,

3

(1).

48~72

(4, 5).

가

2

1~2

,

2

3

7

(6)

(7)

2

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가

,

가

가

. 2

,

가

. 2

10

2

5

가

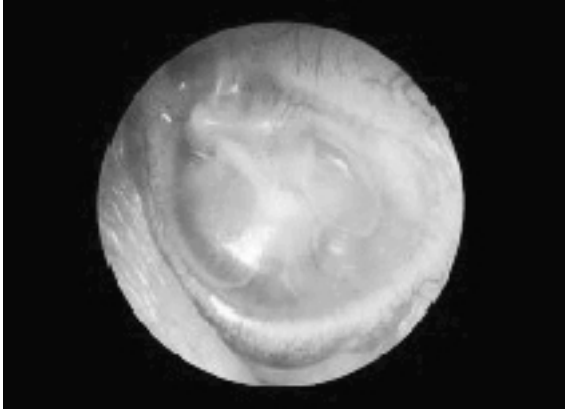
(in-

tratemporal)

(intracranial)

,

(mastoiditis)



4.

(Otitis Media with Effusion)

가  
 가 . 가  
 6~24 가 가

( 4)

(Recurrent acute otitis media)

6 3 , 1 4

. Sulfisoxazole 50 mg/  
 kg/day, amoxicillin 20 mg/kg/day

, 1 1

가

(8).

가

가

4~6

가

가

, 10

, influenza

14%가

(12). 3

가

7%

9~23%

가

20%가

가

(9).

가

1.

Condition	Treatment
OM with bulging tympanic membrane	Immediate treatment with high - dose amoxicillin(80 ~ 100 mg/kg of body weight per day orally) for 7 days*
OM without bulging tympanic membrane	Delayed antibiotic - prescribing strategy †
Recurrent acute OM	Delayed antibiotic prescribing strategy † Immunization with influenza vaccine
Resistant bacterial otitis	High - dose amoxicillin-clavulanate(80 ~ 100 mg of amoxicillin/kg per day orally) for 7 days, cefuroxime axetil(30 mg/kg twice a day orally) for 7 days, or ceftriaxone(50 mg/kg per day IM) for 3 days

\* For children who are allergic to penicillin, preferred alternatives include cefuroxime axetil or another second - generation cephalosporin(other than cefaclor, which may cause a serum sickness like reaction), azithromycin, or ceftriaxone(50 mg/kg once)

† The delayed antibiotic prescribing strategy is as follows : initiate treatment with full - dose acetaminophen ; provide a prescription for amoxicillin to be used only if otalgia or fever persist or if there is no clinical improvement after 48 to 72 hours ; advise the patient s parent that antibiotics do not work very well against otitis and have virtually no effect during the first 24 hours ; explain the disadvantages of antibiotics to patient s parents - they may have side effects(e.g., diarrhea and rash) ; and select for resistant bacteria

Table from Hendley JO. Otitis media. N Engl J Med 2002 ; 347(15) : 1169 - 74

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*Pseudomonas aeruginosa, Staphylococcus aureus, Klebsiella Proteus* 가

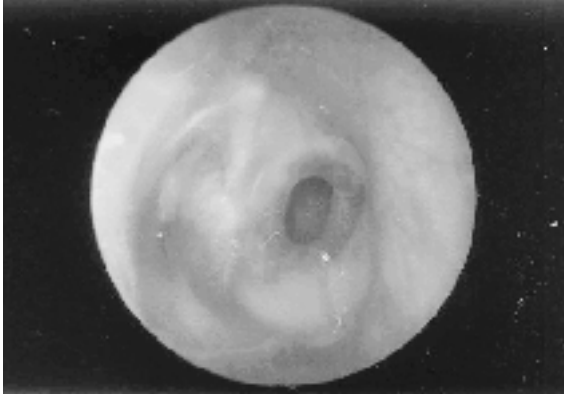
(Chronic Otitis Media)

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5.

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