

고막성형술의 치료성적

이원상 · 김재원 · 김지수

Results of Myringoplasty

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ABSTRACT

A review of the literature reveals that many technique have been developed and employed successfully. We have been carried out new tehnique of myringo - plasty in chronic otitis media patients with simple perforated drum. To evaluate the results of tympanic graft technique and to identify factors that could influence the success of tympanoplasties, a retrospective study of 163 patients who had undergone myringoplasty during the years 1990 - 1995 at the Department of Otolar - yngology in Yonsei Medical Center was performed.

The myringoplasty was conducted by the following described techniques :

- 1) Grafting the drum with onlay technique on the anterior portion of the annulus.
- 2) Graft material was inserted into medial side of malleus handle.
- 3) Tympanomeatal flap was dividing and the drum was covered by the skin of the posterior external auditory canal as taking under one's wing.

Anatomic success rate was 92%. There was no statistically significant correlation between the age, location of perforation, middle ear mucosa status, eustachian tube function and the outcome of the uptake rate. The most decisive factor influ - encing results appeared to be the surgeon's technique.

When compared between preoperative and postoperative air - bone gap, worsened hearing postoperatively was observed in 3.7%.

Postoperative complications were reperforation (8%), draining (3.1%), and he - aring loss (3.7%).

We conclude that myringoplasty as stated above is a safe procedure and has a high probability of success. (1(2):182-189, 1997)

KEY WORDS : Myringoplasty · Air - bone gap.

서 론

1950 Wullstein²⁾ Zollner³⁾
가

1878 Berthold¹⁾ ' Myringo -
plastik '

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: , 120 - 752 134
) (02) 361 - 8477,) (02) 393 - 0580

88 97%⁴⁻¹⁰⁾

가

Table 1. Age and sex distribution

Age	Male	Female	Total (%)
10 - 19	4	7	11 (7%)
20 - 29	14	15	29 (18%)
30 - 39	20	31	51 (31%)
40 - 49	15	15	20 (18%)
50 - 59	8	16	24 (15%)
60 - 69	4	14	18 (11%)
Total	65 (40%)	98 (60%)	163 (100%)

16

4)11)

(near - total)

(total)

대상 및 방법

가

연구 대상

가

1990 3

1995 12

163

(polyethylene tube)

1

163

28

135

500,

65

98

1000, 2000 Hz

1000 Hz

39

30

가

2

500 Hz

2000 Hz

4

4

2가

(Table 1).

24

96

55

가

연구 방법

11 dB

A

가 10 dB

B , 11 dB

C

10 dB

11 dB

20 dB

, 21 dB

가

(lateralization)
 가
 가 10 dB
 Chisquare test
 0.05

가
 2),
 50%
 tympanomeatal flap
 (Fig. 3)
 gelfoam

수술 방법

(tympanomastoid)
 (tympanosquamous)
 Xylocaine(2% lidocaine+1 : 100,000 epinephrine)
 (transmeatal approach)
 20
 (retroauricular approach)
 trimming
 12
 1 5
 가
 tympanomeatal flap

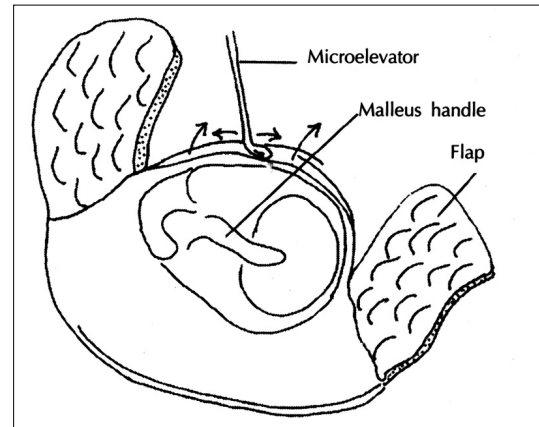


Fig. 1. Technique of myringoplasty (1). Grafting the drum with onlay technique on the anterior portion of the annulus.

2.5
 가
 2 cm
 , 1.3 1.5 x 2 cm
 가
 3
 (Fig. 1),

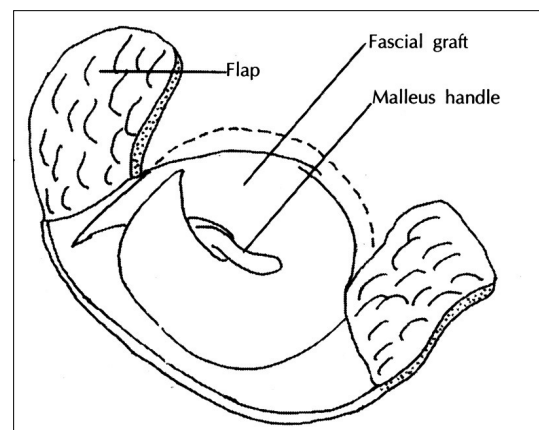


Fig. 2. Technique of myringoplasty (2). Graft material was inserted into medial side of malleus head.

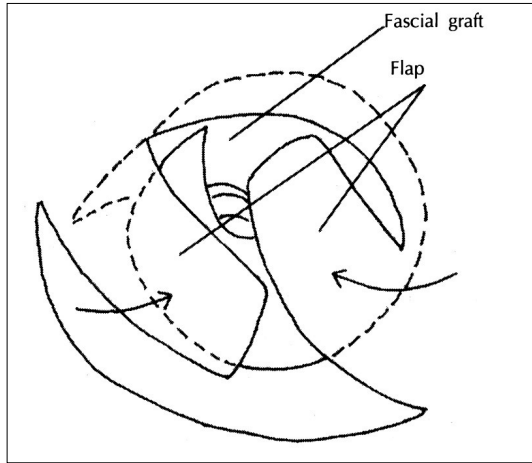


Fig. 3. Technique of myringoplasty (3). Drum was grafted by dividing the skin of the posterior external auditory canal as taking under one's wing.

결 과

고막이식 결과에 대한 분석

	Age		Total
	Less than 16 years-old	More than 17 years-old	
Uptake	7	143	150
Perforation	1	12	13
Total	8 (5%)	155 (95%)	163

p > 0.05

Table 3. Graft uptake rate related to age of patients

	perforation location			Total
	Central	Marginal	Near-total	
Uptake	91	17	36	144
Perforation	6	1	5	12
Total	97 (60%)	18 (11%)	41 (25%)	156

p > 0.05

Table 3. Graft uptake rate related to perforation location

	Middle ear mucosa		Total
	Dry	Wet	
Uptake	118	32	150
Perforation	9	4	13
Total	127 (78%)	36 (22%)	163

p > 0.05

Table 5. Graft uptake rate related to middle ear mucosa status

Postop. follow-up		Total
less than 6 months	more than 6 months	
Uptake rate	153 (94%)	163 (100%)
	150 (92%)	

Table 2. Graft uptake rate related to postoperative follow-up duration

Middle ear mucosa		Total
Dry	Wet	
Uptake	118	150
Perforation	9	13
Total	127 (60%)	163

p > 0.05

p > 0.05

(Table 5).

154 94% ,
 9 6% .
 가 92.2% ,
 88.9%

(Table 6).

술후 청력결과에 대한 분석

163 , 135
 가 11 dB
 A 50 37% ,
 가 10 dB 가 B
 80 59% , 11 dB C 5
 4% (Table 7).

가 10 dB
 81 60% , 11 dB 20 dB 34
 25%, 21 dB 20 15%
 (Table 8).

Table 6. Graft uptake rate related to patency of eustachian tube

	E-tube function		Total
	Patent	Obliterated	
Uptake	142	8	150
Perforation	12	1	13
Total	154 (94%)	9 (6%)	163

p>0.05

Table 7. Difference of A-B gap between preoperative and postoperative

	A	B	C	Total
Preop.-Postop. A-B Gap	50 (37%)	80 (59%)	5 (4%)	135 (100%)

A-B : Air conduction-bone conduction
 A : Improved group
 B : No change group
 C : Worse group

Table 8. Postoperative A-B gap

	- 10 dB	11 dB - 20 dB	21 dB -	Total
Postoperative A-B Gap	81 (60%)	34 (25%)	20 (15%)	135 (100%)

Table 9. Postoperative complications

Type	No. of cases (%)
Reperforation	13 (8.0%)
Draining without perforation	5 (3.1%)
Hearing loss	5 (3.7%)

술후 합병증에 대한 분석

(lateralization) ,
 가 ,
 13 8%, 가 5 3.1%
 ,
 135 5 3.7%
 (Table 9).

고 찰

4)

scutum
 scutum
 50%
 tympanomeatal flap
 가

가 ,

가 , anterior blunting

가 , (total)가

15)16)

underlay

3 12% , 4-9) overlay 3 4.4% 4)10)

가

163

6 10 6.1%

1 13 8% overlay 가

가

9)15)

, 4가

13)17) 가

Rizer⁴⁾ Vartiainen⁹⁾

가

3 15%

5)6)10)15) 3.7%

5

가 가 3

2

가 Cahart

35% 93% 12-14)

16 가 가

87.5% 18) 가 21 dB

1 15% Vartiainen⁹⁾ 13%

7 , 20

5 ,

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