

선천성외이도협착증의 수술경험 53례 분석

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= Abstract =

Surgical Experiences of Congenital Aural Atresia Analysis of 53 Cases

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Congenital aural atresia requires reconstructive surgery because of its negative effect against hearing and cosmetic problem. Two surgical methods, anterior and transmastoid approaches, have been designed for the surgery and many surgeons have advocated any techniques depending on their surgical experiences and advantages of each method.

We analyzed retrospectively 53 cases of congenital aural atresia operated with the use of one of both approaches, and got the clinical, audiological and surgical results as follows.

- 1) Postoperative dressing period was shorter in the anterior approach(34.5 days) than in the posterior one(44.2 days).
- 2) Hearing results are better in the anterior approach.
- 3) Postoperative complications include granulation tissue formation, drum lateralization, external auditory canal stenosis and temporary facial nerve weakness. And it happened more frequently in the anterior approach than the posterior one.
- 4) Facial nerve anomaly was noted in 16 cases(30.2%) and cholesteatoma in 5 cases(9.4%).
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KEY WORDS : Congenital aural atresia · Facial nerve anomaly · Hearing threshold · Middle ear anomaly · Surgical approach.

					(epithelial ingrowth)
	서	론	meatal plate	canalization	.
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chial cleft)	,				
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 (sinodu - 39 가 28 , 가 11
 15.0 3.3
 가 35.0 (Table 2).
 62.0dB
 - 52.9dB
 10)11)15)16) .
 10 77% 20dB 61.5%
 53

대상 및 방법

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 14 , 39

500Hz,
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결 과

53 가
 28 (52.8%), 25 (47.2%) .
 (atresia) 39 (73.6%),

(stenosis) 14 (26.4%)

3mm

가 14.6 , 12.4 (Table 1).
 가 8 가 6 .
 9.6 4 25 .
 (sinodu - 39 가 28 , 가 11
 15.0 3.3
 가 35.0 (Table 2).
 62.0dB
 - 52.9dB
 10)11)15)16) .
 10 77% 20dB 61.5%

Table 1. Laterality and degree of stenosis

EAC obstruction	Unilateral	Bilateral	Total
Complete	20	19	39
Incomplete	8	6	14
Total	28	25	53

EAC : external auditory canal

Table 2. Age and sex distribution according to surgical approach

Anterior approach (14 cases)	Posterior approach (39 cases)
Mean age(yr.) : 9.6(4 - 25)	Mean age(yr.) : 15.0(3.3 - 35)
M/F : 8/6	M/F : 28/11

Table 3. Types of ossicular anomaly

EAC obstruction	Ml fusion	Stapes anomaly	All miss	Labyrinth hypoplasia	Total
Complete	19	4	1	1	25
Incomplete	4	1			5

M : Malleus, I : Incus, EAC : External auditory obstruction Others(11 cases) include minor malformation or destruction of one or two ossicles

Table 4. Variation of facial nerve anomaly

	Facial exposure	Displacement of facial nerve			
		ant.	post.	lat.	inf.
Complete	8	4		1	2
Incomplete	1	1	1	1	
Total	9 cases			7 cases	

Table 5. Periods of postop treatment

	Anterior app.	Posterior app.
Period of postop. treatment(days)	34.5	44.2
Hearing gain(>20dB)	77.0%	52.6%
Residual AP gap(<30dB)	61.5%	42.1%
Preoperative air conduction threshold : 62.0dB		
Air-bone gap : 52.9dB		

Table 6. Postop complication

	Anterior app. (14)	Posterior app. (39)
Stenosis	1	2
Drum lateralization	3	0
Granulation	4	5
Infection	-	3
Total	8(57.1%)	10(25.6%)

- 가 30dB
52.6% 20dB
42.1% - 가 30dB
(STSG, split thickness skin graft)

34.5 , 44.2 (Table 5).
(57.1%) (granulation tissue),
(drum lateralization),
nal stenosis),
1.7 , 39
10 (18.9%)

(Table 6).

29 (54.7%)
23 (43.4%) 가
1 4 ,
1 23
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(Table 3).
16 (30.2%)
9 , 가 7 (Ta-
ble 4).
5 (9.4%) ,
2 (3.8%)

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(1st branchial cleft)
(epithelial ingrowth) me -

atal plate canalization , 10,000
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6) , 36 : 17
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가 .
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가
(binaural hearing)
가
가

2) 가 11)12)

4

가 34.5 44.2

1

가 가 ,

2)10) 14.6 , 12.4

10

가 (maximal conductive hearing loss)

가 (speech reception threshold, SRT) 50 60dB

가 ,

가 15 25dB

가 1)2)7) 62.0dB

20dB

77%, 30dB

가 가 61.5%

4 20dB 52.6%, 30dB

2) 가 42.1%

(anterior approach)

(sinodural angle)

(transmastoid approach)

Glasscock¹¹⁾(1980), De la Cruz⁹⁾(1985)

drilling

cavity problem

Jahrsdoerfer¹²⁾(1978)

가 가 7)15)

cavity pr - 8 (57.1%)

oblem , 가 ,

가 ,

가 10 (25.6%)

결 론

53

(facial nerve anomaly)

가 1) 52.8%

14.6 47.17%, 12.4

가 4 35

73.6% 26.4%

1)10)14)

2) 62.0dBHL

16 (30.2%)

가 9 (56.3%)

7 (43.8%)

3) 77%가 20dB

, 61.5% 30dB

(Residual Air - Bone gap closing)

52.6%

(development)

42.1%

4) 34.5

44.2

5) 8 (57.1%)

가 11)12)14)

11 (28.2%)

29 (54.7%)

1.7 , 1.3

23 (43.4%) 가

6) 16 (30.2%)

가 9 (56.3%), 7

(malformation)

23 11

7) 5 (9.4%)

2

References

2mm

가

, 3

12

2) 5 (9.4%)

2

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