

## 뇌지주막 낭종의 치료결과 분석

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= Abstract =

### Analysis of Treatment Result of Arachnoid Cyst

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**O**bjective : The present study was performed to analyze treatment results for 22 cases of arachnoid cyst and to have appropriate surgical method in our department.

**Material and Methods** : We performed a retrospective study in 22 cases in 11 years between 1989 to 2000 that could be followed up. The analysis was based on the results of patients age, sex distribution, developed area, clinical symptom, treatment method, and complication.

**Results** : The age range of cyst development was between 7 months to 60 years with the average age of 21 years. As for sex distribution, 20 were male and 2 were female, with significantly more cyst development in males than females.

Thirteen cases were developed in the sylvian fissure, 3 cases in the posterior fossa, 4 cases in the cerebral convexity of the supratentorial area, 1 case in the suprasella and 1 case in interhemisphere.

Those cases with the sylvian fissure involvement included 6 cases of Type I, 4 cases of Type II, and 3 cases of Type III. As for the distribution according to hemisphere, more arachnoid cysts were seen in the right hemisphere.

The most common clinical symptom was headache, followed by seizure and speech disturbance.

As for the treatment method in 22 cases, surgery was performed in 17 cases and conservative treatment in 5 cases.

Fenestration was performed in 14 cases. 13 cases of them showed good outcome, and 1 case with delayed development showed no improvement. Cyst - peritoneal shunt was done in 2 cases. Both fenestration and cyst - peritoneal shunt were done in 1 case.

**Conclusion** : Patients who performed fenestration were showed good outcome with few complication. We concluded that fenestration is the most appropriate surgical method for arachnoid cyst.

**KEY WORDS** : Arachnoid cyst · Fenestration.

## 서 론

Richard Bright가 1831

spinal axis)

가 ,  
가 <sup>5)</sup>.

Starkman <sup>18)</sup>

가

1% ,

(sylvian fissure)

(cerebro-  
16)18).

가

13).

### 대상 및 방법

1989 1 2000 12

22 17  
5

### 결 과

#### 1. 연령 및 성별분포

7 60 21  
1 1 (6 ) 4  
(7 10 ) 3 (11 19  
) 4 , 20 10  
19 12 20  
20 , 2  
(Table 1).

**Table 1.** Age and sex distribution

Age(year)	Sex		Total
	Male	Female	
Infant(<1)	1	0	1
Preschool( 6)	4	0	4
Prepuberal(7 - 10)	3	0	3
Adolescence(11 - 19)	4	0	4
Adult( 20)	8	2	10
Total	20	2	22

**Table 2.** Location of the arachnoid cysts

Location of cyst	Right	Left	Midline	Total
Sylvian fissure	8	5	0	13
Posterior fossa	1	1	1	3
Cerebral convexity	2	2	0	4
Suprasella	0	0	1	1
Interhemispheric	0	1	0	1
Total	11	9	2	22

#### 2. 발생부위

13 가  
(cerebral convexity) 4 ,  
3 , 1 , (interhemispheric)  
1 , 11  
, 9 (Table 2).

Galassi (1982)  
Type 6 , Type 4 , Type  
3 8 , 5  
(Table 3).

#### 3. 임상증상

가  
가  
(Table 4).

#### 4. 치료방법 및 결과

22 17 ,

**Table 3.** Type of the arachnoid cysts on sylvian fissure

Type	Side		Total
	Right	Left	
Type	4	2	6
Type	3	1	4
Type	1	2	3
Total	8	5	13

Type : mildest form, small and spindle-shaped in temporal fossa, no mass effect, no cranial deformity

Type : classic type, medium-sized, triangular or quadrangular shape, anterior and middle temporal fossa, open with insula, clearly foreshortened temporal lobe

Type : the most severe form, huge oval or round shaped, almost temporal fossa, wide cerebral hemisphere, splitting opercula, atrophic temporal lobe, mass effect, cranial deformity

**Table 4.** Sign and symptom of arachnoid cysts

Sign and symptom	No.
Headache	9
Seizure	3
Speech disturbance	2
Delayed development	1
Craniomegaly (or deformity of skull bone)	1
Mental retardation	1
Increased ICP	1
Visual disturbance	1
Gait disturbance	1
No symptom	2

5 가  
 가 가 가 Type  
 2 , 1 , 1  
 17 , 가  
 가 14 , 가 2  
 가 가 2 , 1  
 가 1  
 (Table 5). 1  
 14 , 13 1

(Table 6).

**Table 5.** Surgical management of arachnoid cysts

Operation	Location					Total
	Sylvian fissure	Posterior fossa	Cerebral convexity	Suprasella	Interhemispheric	
Fenestration	9	2	2	0	1	14
Cystoperitoneal shunt	1	0	1	0	0	2
Fenestration & C-P shunt	0	0	0	1	0	1
Total	10	2	3	1	1	17

**Table 6.** Case summary of arachnoid cysts

Case No	Age/sex	Location	Chief complaint	CT or MRI finding	Treatment method	Result	Complication
1	M/42	Sylvian fissure	Seizure	Type	Conservative Tx	Improved	
2	M/7	Sylvian fissure	Incidental found	Type	Conservative Tx	Improved	
3	M/23	Convexity	Headache		Conservative Tx	Improved	
4	M/43	Sylvian fissure	Seizure	Type	Conservative Tx	Improved	
5	M/33	Posterior fossa	Headache		Conservative Tx	Improved	
6	M/7ms	Intehemisph-eric	Delayed development		Fenestration	No change	Hydrocephalus
7	M/42	Sylvian fissure	Headache	Type	Fenestration	Improved	
8	M/15	Convexity	Mental retardation		Fenestration	Improved	
9	M/19	Sylvian fissure	Headache	Type	C-P shunt	Improved	Seizure
10	M/27	Sylvian fissure	Headache	Type	Fenestration	Improved	
11	M/2	Suprasella	Gait disturbance		Fenestration & C-P Shunt	No change	Subdural hygroma & hydrocephalus*
12	M/11	Convexity	Headache		C-P shunt	Improved	
13	M/4	Sylvian fissure	Incidental found	Type	Fenestration	Improved	Seizure
14	M/9	Sylvian fissure	Speech disturbance	Type	Fenestration	Improved	Subdural hygroma
15	F/24	Posterior fossa	Visual disturbance		Fenestration	Improved	
16	M/2	Convexity	Craniomegaly		Fenestration	Improved	
17	M/6	Sylvian fissure	Speech disturbance	Type	Fenestration	Improved	
18	M/60	Sylvian fissure	Headache	Type	Fenestration	Improved	Subdural hygroma
19	M/10	Sylvian fissure	Headache	Type	Fenestration	Improved	
20	F/37	Posterior fossa	Increased ICP		Fenestration	Improved	
21	M/16	Sylvian fissure	Seizure	Type	Fenestration	Improved	
22	M/28	Sylvian fissure	Headache	Type	Fenestration	Improved	

\* : Hydrocephalus : Ventriculo-peritoneal shunt was done

고찰

Richard Bright 1831 Pascual<sup>13)</sup>  
<sup>3)</sup> 가  
Auer<sup>1)</sup> 가  
<sup>18)</sup> , ,  
가 가 <sup>9)</sup> ,  
<sup>9)</sup>, ball - valve mechanism<sup>10)</sup>  
가 가  
Rengachary Watanabe<sup>16)</sup>  
가 , Galassi<sup>6)</sup>  
. Type <sup>2)</sup> .  
, Type <sup>11)15)</sup> .  
insula floor  
, Type 가 (bridging vein)  
가 <sup>4)</sup> . 가  
, ,  
<sup>7)</sup> .  
가  
, , <sup>17)</sup>, Ciricillio<sup>4)</sup>  
Type 6 가  
가  
<sup>4)</sup> . <sup>14)</sup> .  
22 , 5  
가 , , 17 , 14  
, , <sup>4)</sup> . 1  
, ,  
, , 가  
<sup>8)11)</sup> . 가

결 론

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