

뇌수술의 비방수성 경막 봉합

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= Abstract =

Non-Watertight Intermittent Dural Closure in Neurological Surgery

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Objective : In neurosurgical practice, it has been generally accepted that when the dura is opened, it should be watertightly closed, and traditionally non - watertight closure has not been performed. We clinically tried non - watertight closure, analyzed the frequency of CSF leakage and evaluated the possible clinical application of non - watertight closure.

Methods : After classifying our cases with supratentorial and infratentorial approach, we tried non - watertight and watertight closures and compared the results. We also analyzed the cases with or without dural graft.

Results : In supratentorial approach, the rate of cerebrospinal fluid leakage noted in non - watertight closure was similar to that of watertight closure. In infratentorial approach, except microvascular decompression(MVD), the rate of cerebrospinal fluid leakage in non - watertight closure was higher than that of watertight closure. Dura graft application did not seemed to influence the cerebrospinal fluid leakage.

Conclusion : Since the frequency of cerebrospinal fluid leakage was not higher in non - watertight closure than that of watertight closure, non - watertight closure can be applied in supratentorial approach. In infratentorial approach, non - watertight closure may be applied in surgery with relatively short dural incision, such as MVD. However, non - watertight closure doesn't seem to be appropriate in surgery that requires wide dural incision, such as skull base surgery.

KEY WORDS : Non - watertight dural suture · Watertight dural suture · Brain surgery.

서 론

가

대상 및 방법

1997 8 1 1998 9
4 가 49 1

1cm
Gelfoam
Gelfoam (barrier)
(lyoplant : bovine pericard -
ium)
(leakage) (fistula)
(collection) (fi -
stula) (collection)
49 25
3
Fisher's exact test

결 과

49 5 25 4 33
(Table 1).
37 1 21 3 8 1 16
(Table 2). 12 1 4 3
가

Table 1. Comparison of CSF leakage in watertight and non-watertight suture

	Watertight suture	Nonwatertight suture
Total	25	49
Leakage	4	5

(Fisher's exact test, p>0.05)

Table 2. Comparison of CSF leakage in supratentorial approach

	Watertight suture	Nonwatertight suture
Total	21	37
Leakage	3	1

(Fisher's exact test, p>0.05)

Table 3. Comparison of CSF leakage in nonwatertight suture

	Supratentorial approach	Infratentorial approach
Total	37	12
Leakage	1	4

(Fisher's exact test, p=0.023)

Table 4. Comparison of CSF leakage according to dura graft in nonwatertight suture in supratentorial approach

	Supratentorial approach	
	Dura graft	Suture only
Total	12	25
Leakage	1	0

(Fisher's exact test, $p > 0.05$)

Table 5. Comparison of CSF leakage according to dura graft in nonwatertight suture in infratentorial approach

	Infratentorial approach	
	Dura graft	Suture only
Total	4	8
Leakage	3	1

(Fisher's exact test, $p > 0.05$)

(Fisher's exact test, $p = 0.101$).

4 3 , 8
1

가
(Table 4, 5).

23

20.4cm
18.7 , 5
18.2cm, 31 .

고 찰

가

가

가 Gelfoam

Schievink ⁵⁾

Gelfoam

결 론

가

가

가

(dead space)

가

가

가

가

Van Calenbergh⁶⁾

78

5

가

가

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