

뇌동맥류의 혈관내 수술시 합병증 발생과 치료법

권 양

Endovascular Complication and Its Management in Intracranial Aneurysm

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서 론

가

가

가

가

가

1. 혈관내 코일 색전술(Coil embolization)과 관련되어 발생할 수 있는 합병증

가

가

가

¹⁾⁹⁾

(stroke),

(prolapse)

(migration),

compaction

⁸⁻¹⁰⁾

guide wire

⁹⁾¹⁰⁾

1) 뇌동맥류 파열

Serbinenko가

가

가

(balloon)

¹¹⁾

(platinum coil)

Guglielmi detachable coil(GDC)

가

가

Guglielmi ⁶⁾

91

4

4.3%

Pierot ⁹⁾

¹⁾²⁾⁷⁾⁹⁾

35

2

6%

가

Raymond ¹⁰⁾

8%

가

48

가 3mm
 100 3
 3% ,
 guide wire
 3
 fundus
 , basket
 packing
 가
 dome
 가
 8)
 가
 (compaction)
 가

2) 뇌혈관 연속
 oxyhemoglobin
 free radical
 12)
 Yalamanchili 12)
 가
 protamine sulfate
 가
 9)10) GDC fibered coil
 가
 가

3) 뇌졸중(Stroke)
 가
 (prolapse) (migration)
 2)
 guiding catheter
 heparin
 Phatouros 8)
 (migration) 4 (prolapse)
 3 가
 가
 가
 가
 (pseudosac)
 가 (reo-
 rganization) 가
 1 가

2. 혈관내 코일색전술과 관련되어 발생한 합병증의 치료
 1) 뇌동맥류파열
 가
 가 4)
 가
 가

GDC Connor ⁴⁾ GDC standard fibered coil 가 가

(temporary occlusion) 가 (balloon attached catheter)

가

가

2) 뇌혈관연축

Fortin ⁵⁾ 25% 10cc

(Ca + + transport)

3H

Table 1. Location of aneurysm treated with endovascular procedure(N = 100)

Posterior circulation		64
Basilar artery	27	
SCA	7	
PCA	2	
AICA	6	
VA	16	
PICA	6	
Anterior circulation		36
ICA, cavernous	29	
Ant. choroidal	2	
Acom A	2	
MCA	3	
Total		100

3) 뇌졸중(Stroke)

3. 혈관내 코일색전술시 합병증의 예방

1) 뇌동맥류 파열의 예방

3mm

Table 2. The cause of death related to endovascular procedures(N = 7)

Cause of death	No. of patients (%)
Rupture during procedure	3 (42.9)
Rupture within 48 hrs.	2 (28.5)
Vasospasm	1 (14.3)
Stroke	1 (14.3)
Total	7 (100)

Table 3. The causes of major morbidity(N = 6)

Complications	No. of patients (%)
Visual loss	2 (33.3)
Hearing loss	1 (16.7)
Wallenberg syndrome	1 (16.7)
Neurologic deficit requiring op.	1 (16.7)
Hemiparesis	1 (16.6)
Total	6 (100)

Table 4. The cause of minor morbidity(N = 13)

Minor complication	Cause	No. of patients
Transient vessel occlusion	Coil prolapse	1
Minor leakage		4
	Basilar a	2
	SCA	1
	Distal ACA	1
Coil disruption		4
	SCA	1
	Basilar a	1
	VA	1
	ICA	1
Vessel wall injury		4
	Femoral a	3
	VA	1
Total		13

10) .
 , road map
 , 가
 .
 , wire
 wire가
 .
 ,
 standard coil 2D coil soft type coil
 packing
 가
 3H

2) 코일의 탈출과 이동의 예방

helical diameter가

(patent artery)

stretch resistant coil
 3)8)

가

4. 본교실의 체험

1996 1999 4
 가
 27 , 7 , 16
 64 ,
 29 , 2 36 100
 (Table 1),

7% 가

6% ,

(Table 2 - 4).

13%

결 론

(prolapse) (migration)
 (stroke), compaction
 8-10)

가 , GDC

- : 1999 7 6
- : 1999 9 16
- :
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