

## 경증격을 통한 오른쪽 속목동맥 협착증 환자에서의 스텐트 삽입술 1례

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### A Case of Transseptal Approach to Carotid Artery Stenting in Right Internal Carotid Stenosis

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#### ABSTRACT

Although the carotid endarterectomy presently represents the standard therapeutic approach for most patients with significant carotid artery stenosis, a percutaneous transluminal angioplasty (PTA) with stenting has become an alternative method for treating patients with comobid conditions, particularly coronary artery disease. A PTA with stenting has the potential for being safer, less traumatic, more cost-effective, and useful in patients at high surgical risk. As well, they are not limited to the cervical carotid artery. But it is reported that carotid angioplasty by femoral approach is difficult to do in 1 -2% of patients with carotid stenosis due to abnormal origin of carotid artery or occlusion of femoral arteries. We succeeded in PTA with stenting of tight stenosis of right internal carotid artery through the transseptal approach in case of a sharply angled right brachiocephalic artery take-off from the aorta. The transseptal approach can be used for PTA with stenting in case of problems with femoral approach. **(Korean Circulation J 1998;28(8):1409-1413)**

**KEY WORDS** : Carotid artery stenosis · Transseptal approach · Percutaneous transluminal angioplasty with stenting.

서 론 (carotid artery stenosis)<sup>1)</sup>

500,000 NAS - CE - T (North American Symptomatic Carotid En - dar - terectomy Trial) ACAS (Asymptomatic Ca - rotid Atherosclerosis Study)

200,000

60%가

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: 1998 7 1

: 1998 8 21

: , 120 - 752 134 가

: (02) 361 - 7071 · : (02) 393 - 2041

E - mail : cardio@yumc.yonsei.ac.kr 가

(bifurcation)

(carotid artery angioplasty) 1980 80 / , 20 / , 120/80 mmHg, 37.2C

3) (bruit)

(femoral pulse)

(left popliteal pulse)

(left dorsalis pedis pulse)

가

(carotid artery stenting)

4)

9000/mm<sup>3</sup>,

12.2 g/dl, 182,000/mm<sup>3</sup>

76

X

(transseptal approach)

증 례 혈관 조영술

Seldinger

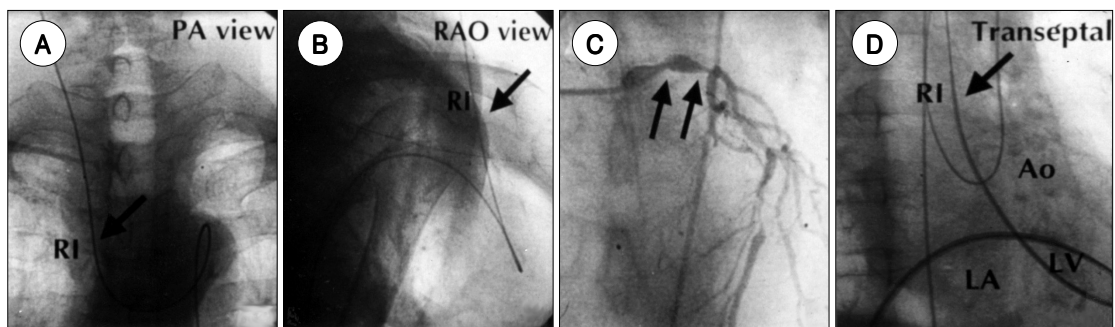
6French(Fr) sheath(DAIG<sup>®</sup>, Minnetonka, MN)

5Fr Judgkin

(Cook<sup>®</sup>, Bloomington, USA)

5Fr pigtail (Cook<sup>®</sup>, Bloomington, USA)

:2 가



**Fig. 1.** A, B : Carotid angioplasty and stenting failed due to a sharply angled right brachiocephalic artery (arrow) take-off from the aorta (PA and RAO view). C : Coronary angiogram reveals significant mid and distal left main coronary artery stenosis (arrow). D : A 8Fr Mullins transseptal sheath was introduced to left ventricle and a 0.018-inch guide wire (Roadrunner<sup>®</sup>) was looped around at the left ventricular apex and passed out of the aortic valve into the ascending aorta and right carotid artery (arrow). RI : right internal carotid artery, Ao : aorta, LA : left atrium, LV : left ventricle, PA view : posterior anterior view, RAO view : right anterior oblique view.

(Fig. 1C)

. 5Fr Newton  
 (Cook®, Bloomington, USA)  
 85% (Fig. 2A).  
 . 0.035 inch Terumo  
 exchange (RADIFOCUS®, Tokyo, Japan)  
 multipurpose (JungSung®, Sung Nam, Korea)  
 . Terumo 0.035 inch ex-  
 trastiff (Cook®, Bloomington, USA) mul-  
 tipurpose  
 7Fr carotid sheath  
 (length 90cm : Cook®, Bloomington, USA)

(Figs. 1A and B)

carotid sheath

sheath

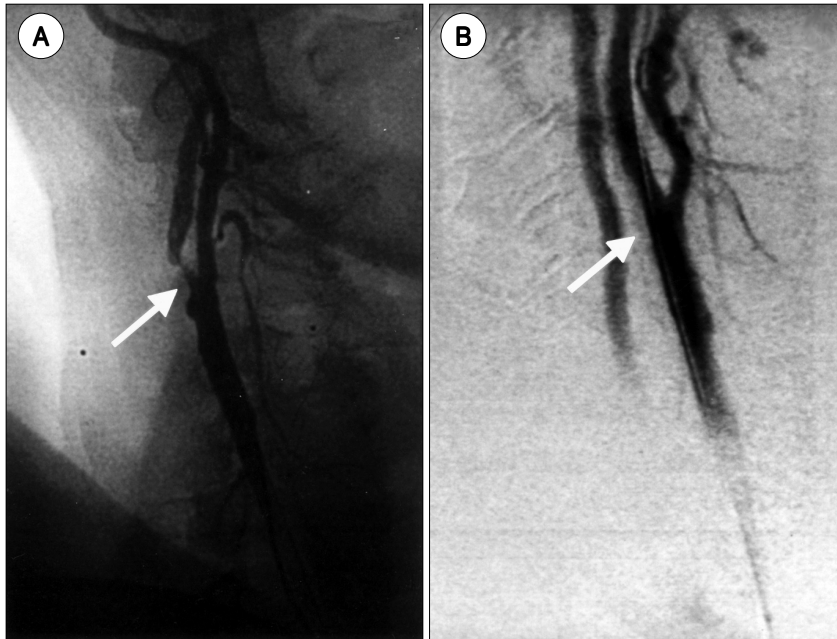
### 목동맥 스텐트 삽입술

7 , (transseptal catheterizat-  
 ion) Brockenbrough trans-  
 septal needle(USCI®, Island, USA)  
 8Fr Mullins transseptal sheath dilator(USCI®,  
 Island, USA) . Mullins transseptal  
 sheath 7Fr Wedge balloon (Arrow®,  
 Philadelphia, USA)  
 loop  
 (Fig.1D). Wedge  
 balloon 0.038 inch exchange  
 (Cook®, Bloomington, USA) ,  
 Wedge balloon  
 4Fr multipurpose  
 . 0.038 inch  
 0.018 inch Roadrunner extrasup-  
 port (Cook®, Bloomington, USA)

. NC Cobra 3.5 mm diameter balloon  
(SCIMED®, Minnesota, USA)

10 30

. Balloon 4F multipur-



**Fig. 2.** A : Angiogram obtained in the right common carotid artery shows high grade (85%) stenosis of right internal carotid artery(arrow). B : Angiogram after angioplasty and stent placement shows smooth luminal outline without no residual stenosis (arrow).

pose  
change  
0.038 inch ex -  
Vascular wall stent(8  
mm x 20 mm)(SCHNEIDER®, Bulach, Switzerland)

20%  
17%

8)  
3

20%  
Symmetry 5.0 mm diameter balloon(Med -  
itech®, Boston, USA) 14 10

(Fig. 2B). 가  
6

고 안

1980

500,000

가

1990 9)

ACAS

1)5) NASCET 가

2)4)

(redical neck dissection)

NASCET

5.8%

18%

가

가

Takayasu's arteritis

(cervical portion)

7.6% 27%

가

가 5% 19%

4)

2.3%

54%

33%

10

900

6)

가 7)

1997 George Joseph  
Takayasu's art -

eritis

10)

가 (antegrade) 가

중심 단어 :

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