

## 혈전내재 병변에서의 관동맥내 스텐트 삽입술의 조기결과

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= Abstract =

### Preliminary Results of Intracoronary Stenting in Thrombus Containing Lesion

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**Background** : Intracoronary stent implantation is a promising modality for establishing the blood flow of complex coronary arterial stenosis. However, previous studies have demonstrated that the angiographically visible thrombus is a high risk factor for possibility of stent thrombosis. So many investigators avoided stent implantation traditionally for thrombus containing lesion because of the potency of thrombogenicity of stent. But recently, advanced rapidly growing technique for stenting and powerful antithrombotic regimens make stent thrombosis rare.

Stent implantation has already been showed a acceptable method for bailout procedure of thrombotic occlusion in patients with angioplasty for acute myocardial infarction and also effective in intimal dissection, suboptimal results and arterial recoil.

Accordingly, we investigated the effectiveness of stent implantation in the presence of intracoronary thrombus.

**Method** : Eighteen patients (AMI 14, Unstable angina 4) underwent PTCA & stent implantation on culprit arterial lesion in all successfully. The stent group was comprised of Palmaz-Schatz stent 10, Cordis 2, Cook 5 and Jo-Med stent 1. Stent implanted to the lesion of remained thrombus visualization on coronary angiography after PTCA.

**Results** : No major complications were developed during hospitalization in all 18 patients. In all patients no stent thrombosis have occurred within 2 weeks after stent implantation. But one patients have showed intracoronary stent thrombus persistently, so we used intracoronary urokinase infusion for 36 hours but there was no visible thrombus after modified anticoagulation and antithrombotic regimen.

**Conclusion** : We harvested good preliminary results of intracoronary stent implantation in the setting of thrombus containing lesion.

**KEY WORDS** : Stent · Acute myocardial infarction · Unstable angina · Thrombogenicity · Thrombus.

## 서 론

### 1. 환자군

18

### 2. 관동맥 측정 (QCA)

### 3. 정 의

1)

1,2)

3-5)

NHLBI

A, B, C and D1

가

6)

D2, E F

(threatened closure)

75%

(vessel closure) TIMI

grade 0 1 (succe -  
ssful intervention)

10%

TIMI grade 3 가

0.04

## 연구 방법

PTCA

PTCA

(Fig. 1, 2).

Q wave

creatine kinase

MB

2

(subacute stent thro -

mbois)

4

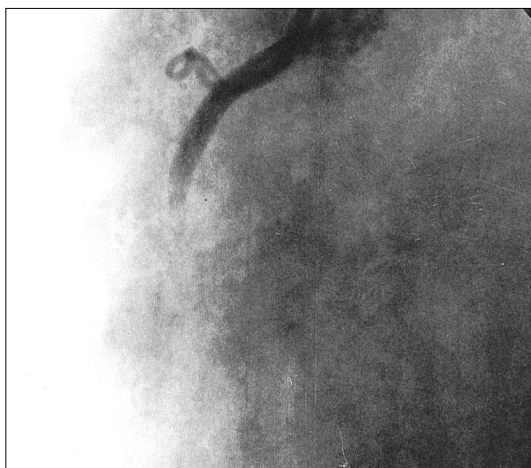


Fig. 1. 우관동맥 근위부에 충만 결손을 동반한 관동맥의 완전 폐색을 보여주고있다.

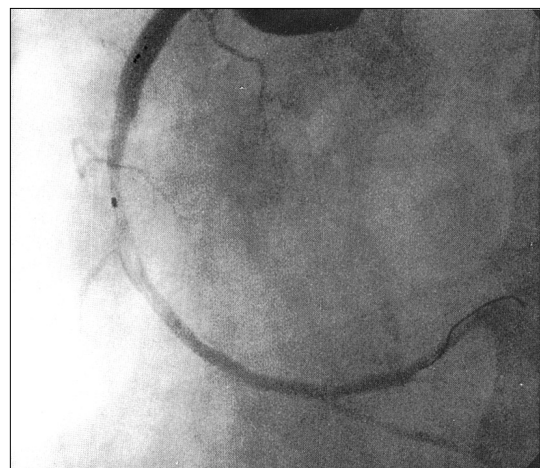


Fig. 2. 풍선 확장술 후에도 등근 형태의 충만 결손을 보여주고있다.

10%  
(Fig. 3). Low molecular weight heparin  
( LMWH) 7500 15000IU 1 2  
2 .

de novo ) ( TIMI 0 TIMI 1)

4. PTCA와 스텐트 삽입술

10,000 IU  
48 , 500mg 2  
1  
500mg .  
PTCA 6-8F  
1 : 1 1.2 : 1  
가 가 가  
가 14  
14

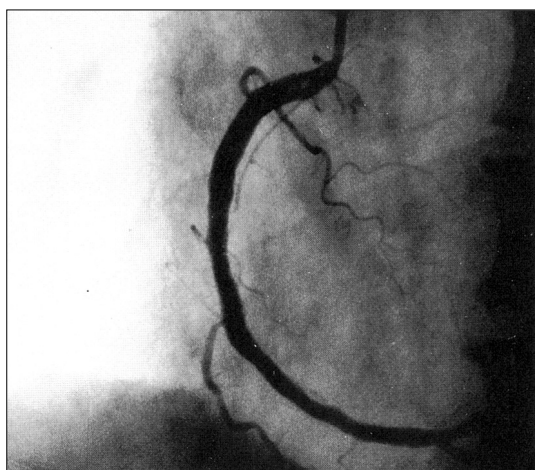


Fig. 3. 스텐트 삽입 후 원활한 동맥관개존을 보여주고있다.

## 결 과

### 1. 환자구성

18 가 14 가 4  
60.2±8 .

### 2. 환자 등의 기본 특성 (Table 1)

PTCA 14 (78%),  
4 (22%) LAD 11(61%),  
Lcx 1(5%), RCA 6 (33%) .  
13 , 5 (96.3±7.2% )  
(100%) 가 .  
12 ,

4  
가 2 .  
7, 10,  
{(

Table 1. 환자의 기본 특성

	(14)	(4)
(yr) (mean ± SD)	59.6 ± 6	68.5 ± 9
	8	
	2	1
	1	1
	2	1
	4	1
	11	3
	3	1
LAD		
Lcx	9	2
RCA	1	
TIMI grade	5	1
0		
1	10	3
2		
3	2	
4	2	

Table 2. Indication for stent( + thrombus)				
	Indication			Total
	Planned	Suboptimal result	Bailout	
LAD(9)	2	6	3	11
RCA(4)	1	3	2	6
Lcx(2)			1	1
Total	3	9	6	18

Table 3. 병변 위치와 스텐트 종류				
	Stent diameter(mm)			
	3.0	3.5	4.0	
LAD	4	5		
Lcx		1		
RCA	5	2	3	
*2	2	가		

1) + thrombus} (Table 2).

3

17% 가 2 7

9 50% 가 6

33% (Table 3). Palmaz -

Schatz 10, Cordis 2, Cook 5, Jo - Med stent 1

(reference diameter) 3.25 ±

0.48mm, : 1.07 : 1

가 15.6

±0.7

6.5 ± 8.45% (p<0.0001).

reference diameter 3.31 ± 0.64mm 5

(28%) 3mm

2 (11%) 2 가

0.35 ± 0.27mm 2.86

±0.53mm

PTCA

15 (83%), 2 (11%)

1 (5%)

gufwjSDL 36

3

6

1

가

75%

2

### 3. 추적 관찰

130 ± 67

2

18 11 (61%)

1

36

가

고 안

가

Teirstein<sup>12)</sup>

28.6%

Sherman<sup>13)</sup>, Uchida<sup>14)</sup> Ramee<sup>15)</sup>

3.1% : 21.9%, 10% : 60%,

12.6% : 71.9%

가

가 )가 <sup>2)</sup>. Agrawal  
 , , , , 2  
 3 20mm 가  
<sup>17)</sup>, <sup>15)</sup>. Wong  
 (凸面)  
 가 <sup>16)</sup>. ,  
 가 <sup>9)</sup> 가  
 가 가  
 .  
 100% 2  
<sup>22,23)</sup>.  
 Malosky  
 thr - 6  
 plasminogen <sup>6)</sup>.  
 가 ombin  
<sup>18)</sup>. ,  
 . Barragan (3  
 가 6 ) (PTT가 control 2 가  
 3 )  
 PTCA 가 30  
 4.2% ,  
 PTCA 70 ,  
 3mm <sup>5)</sup>.  
 Roubin 1 5  
 가 2.5mm  
<sup>19)</sup>. Colombo  
 가 <sup>17)</sup>.  
 가 14  
 .  
 가  
 .  
<sup>4)</sup>. 6  
 13.1%  
 ,  
 ( 가 가

PTCA 가

PTCA가

3)

Walton (reference) 60% (Reology)

가

Index가 0.7 7). Reeder 요 약

PTCA

20) Cantu 연구배경 :

3 7 1 ,

21) 가

PTCA 가

(sm -

oothing effect) , 가

21) ,

2% ,

3-5) ,

방 법 :

18 ( 14, 4)

culprit

가

Palmaz - Sc -

hartz 11, Cordis 2, Cook 5, Jo - Med 1, Micro - II 1

결 론

2

결 과 :

가 18 가 . 1

1% 36 6

결 론 :

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