

경요골동맥중재술에서 심좌법의 유용성에 관한 연구

최해종 · 김무현 · 양창호 · 차광수 · 김혜진
김성근 · 이수훈 · 김상곤 · 김영대 · 김종성

Usefulness of Deep Seating Technique for Transradial Coronary Intervention

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ABSTRACT

Background and Objectives : Smaller guiding catheter had a problem with poor backup support during the transradial coronary intervention which resulted in higher failure rate. This study sought to prove the usefulness of deep seating technique which improves the backup support of the guiding catheter required to deliver interventional materials during the transradial coronary intervention. **Methods :** Thirty-five patients (23 males) were included in this study since March 1998 to August 1999. Clinical presentation of these patients were stable angina (7 patients), unstable angina (17 patients), acute myocardial infarction (11 cases). The mean age was 68 ± 8 years. The treated vessel was left anterior descending artery in 22, left circumflex artery in 2 and right coronary artery in 11 of 35 vessels. **Result :** Twenty-six lesions were treated with stents, 3 with PTCA, and 6 with rotablator. Procedural success were achieved in 33 out of 35 cases (94%). Guiding catheters were used mostly with 6 Fr (30/35). In the left coronary system, usual Judkins left type was used in most of the patients (24/26, 92%), and in right coronary Judkins, Amplatz and multipurpose catheters were used similarly. Hypotension and sinus bradycardia was encountered in one case without clinical significance and there was no dissection in all patients. **Conclusion :** Deep seating technique is a safe and effective technique without major adverse event during the transradial coronary intervention in selected cases. (**Korean Circulation J 2000; 30(8):921-926**)

KEY WORDS : Deep seating technique · Transradial coronary intervention · Backup support.

서 론

1989 Campeau¹⁾ (radial artery)
: 2000 1 10
: 2000 7 15
: , 602 - 715 37가 1

2)

, ,
가
, 90%

: (051) 240 - 5620, 21 · : (051) 242 - 1449
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1991 6 Fr 68 ± 8 가 23 66%
 11 ,
 3)4) 6 Fr 17 7
 (brach - 22 , 2 , 11
 ial artery) ACC/AHA classification of lesion
 type , type A 1 , type
 B1 8 , type B2 12 , type C
 14
 , 6 Fr
 (adequate backup support)
 심좌법의 정의
 (deep seating or deep intubation technique)
 4) 2 cm
 (deep seating technique)
 가 Peel 5)
 45
 6 Fr 6 Fr (7 Fr)
 ten 6) 6 Fr , Roberto von Sohls -
 (30%) (dissection)가
 (<2.5 mm)

대상 및 방법

대상환자의 임상 양상 (Table 1)

1998 3 1999 7
 389
 35

Table 1. Baseline clinical characteristics

| | |
|---------------------------------|-----------|
| Male/Female (persons) | 23/12 |
| Mean age (years old) | 68 ± 8 |
| Clinical diagnosis | |
| Acute myocardial infarction | 11 |
| Unstable angina | 17 |
| Stable angina | 7 |
| Vessel diseased (1/2/3) | 16/15/4 |
| Vessel treated (LAD/LCx/RCA) | 22/2/11 |
| ACC/AHA lesion type (A/B1/B2/C) | 1/8/12/14 |

Abbreviation ; LAD : Left anterior descending coronary artery,
 LCx : Left circumflex coronary artery RCA : Right coronary artery

요골동맥 중재술 및 심좌법

8)9) 6 Fr
 (rotatio -
 nal atherectomy) 7 Fr
 1) 가
 , 2)
 가 , 3)
 가 1)
 , 2) 1)
 , 3) 가

(Cordis britetip Schneider pinkpower) 가 1 (primary curve) 가 Judkins (multipurpose catheter)

(Fig. 1).

결 과

유도도관의 선택

Judkins Left 18 , Judikins Left 4 , Kimny 2 , Amplatz Left 3 , Amplatz Right 3 , Judikins Right 3 , multipurpose 2 (Table 2).

대상환자의 시술소견

| | | |
|-------|----------|------|
| B2/C가 | 26 (74%) | 3/4 |
| | 30 | 6 Fr |
| 5 | 7 Fr | 4 |
| 26 | 3 | |

Table 2. Selection of guiding catheter

| | |
|-----------------------|----|
| Left coronary artery | |
| Judikins left 3.5 | 18 |
| Judikins left 4.0 | 4 |
| Kimny | 2 |
| Right coronary artery | |
| Amplatz left | 3 |
| Amplatz right | 3 |
| Judikins right | 3 |
| Multipurpose | 2 |

Abbreviations ; same as table 1

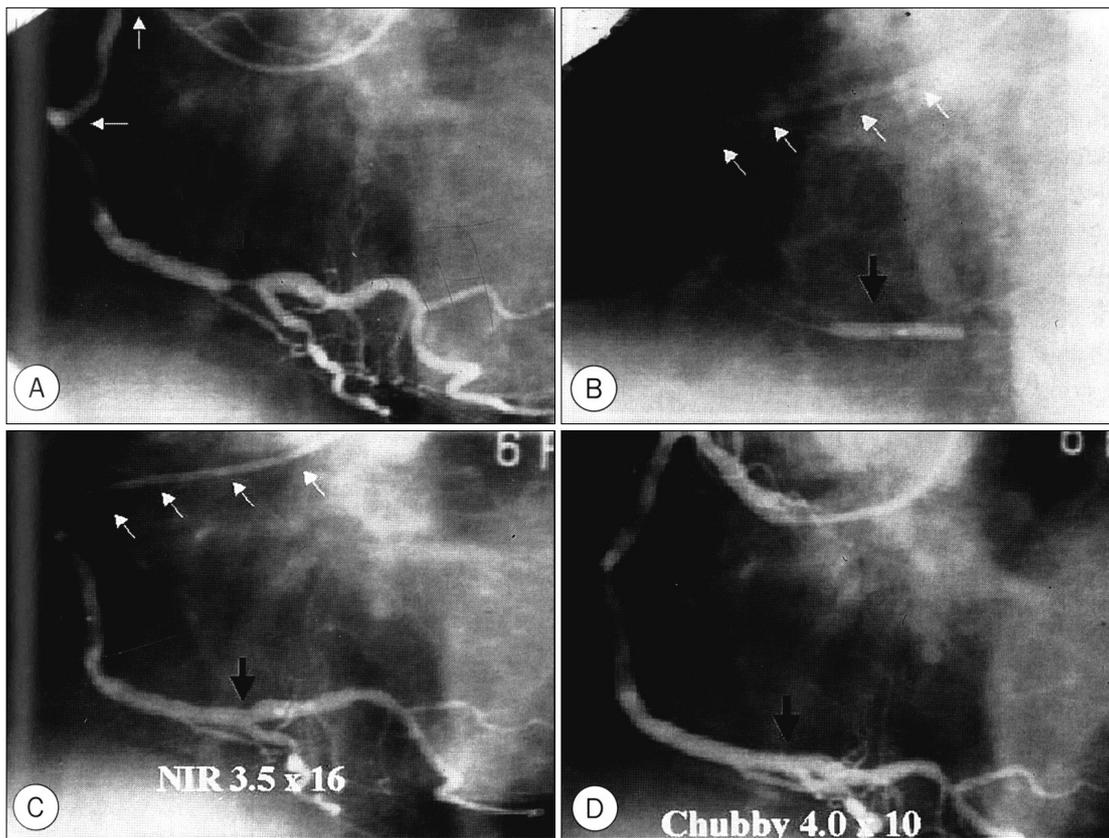


Fig. 1. Example of deep seating technique in 70 year-old man with previously failed PTCA. A : Tortuous right coronary artery (RCA, small arrows) and critically narrowed distal RCA (large black arrow). B : Deeply seated 6 Fr multipurpose catheter (arrow). C : NIR 3.5 x 16 mm stent was implanted without difficulty. D : After chubby 4.0 x 10 mm balloon inflation, good angiographic result was obtained.

ssection)

, 6

Table 3. Procedural results

| | |
|---|-------------|
| Number of procedures | 35 |
| Radial approach | |
| Right/Left approach | 34/1 |
| Size of guiding catheter (6/7 Fr) | 30/5 |
| Types of intervention | |
| PTCA/ Stent/ Rotator | 3/26/6 |
| Reason for deep seating technique | |
| Failure to deliver balloon catheter | 10 |
| Difficulty or expected difficulty in stent delivery | 23 |
| Poor backedup guiding catheter | 2 |
| Procedural success | 33/35 (94%) |
| Complication | 1/35 (2%) |

6
가 10 ,
23 ,
2
35 2
, 1
1
(Table 3).
합병증
(dissection)
, 1

(Fig. 2).

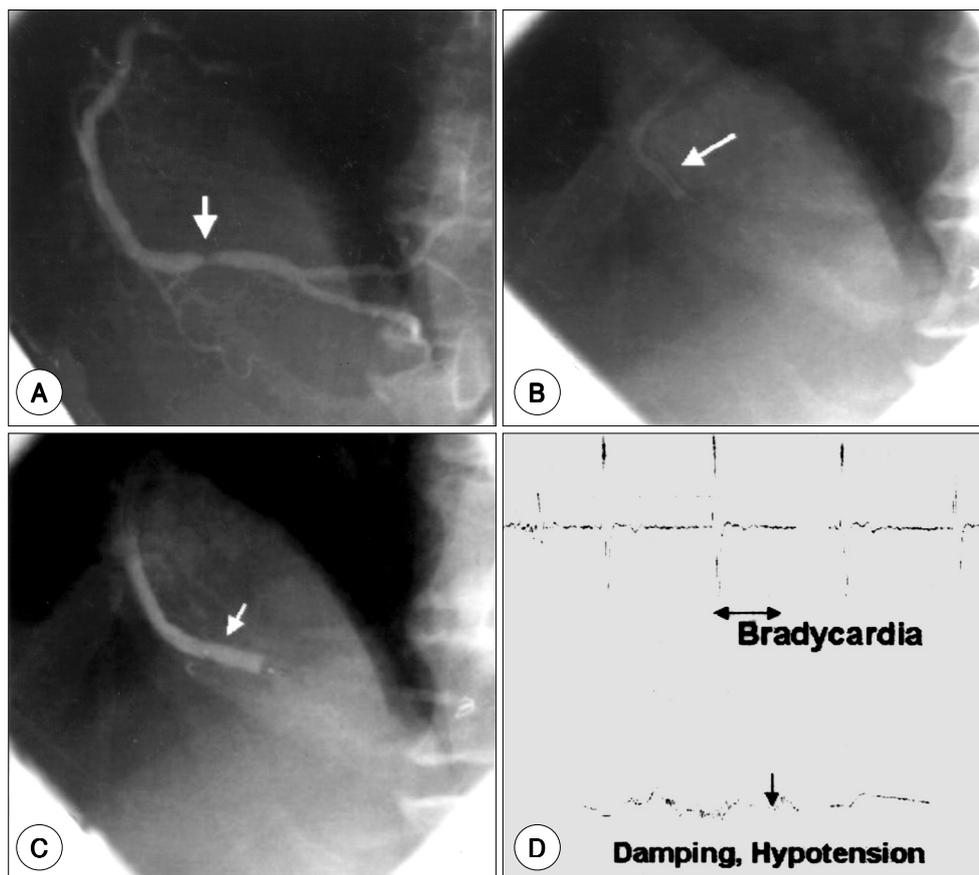


Fig. 2. Complicated case in 63 year-old male. A : 95% stenosis of the distal right coronary artery (arrow). B : Deep seating with AL2 catheter (arrow). C : Balloon inflation. D : Bradycardia and hypotension were developed just after stent insertion, which were disappeared after the guiding catheter removal.

(17/35)

6 Fr

7 Fr

고 안

7 Fr

1989

1)

가 6 Fr

(6 Fr)

7 Fr

가

가

6 Fr

2)8)

5 Fr

가

8)

Cor - dis

3 4%
(1 7%)

brite - tip® Schneider pink - power®

dkins Kimny, Judkins Ju -
trabackup , Judkins Ex -
Amplatz multipurpose

2)6)

가

5-7)

1

(6 Fr)

Amplatz Left 2

(damping)

(Fig. 2).

가 가

(predilatation)

가

10)

요 약

가

연구배경 :

가

가

방 법 : 1998 3 1999 7
 389
 35 23
 12 , 68 ± 8
 22 , 2 ,
 11 . 11 ,
 17 , 7 .
 결 과 : 26 ,
 3 , 6 .
 Judkins left
 Judkins Amplatz, multipurp -
 ose 35 2 1
 , 1
 1 . 6
 결 론 :

중심 단어 :

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