

## 불안정형 협심증 환자에서 조기 관상동맥 중재술 후 예후 변화

조옥현<sup>1</sup> · 박정식<sup>1</sup> · 주신배<sup>2</sup> · 정진옥<sup>3</sup> · 권현철<sup>3</sup> · 박승우<sup>3</sup> · 김준수<sup>3</sup>  
 김덕경<sup>3</sup> · 이상훈<sup>3</sup> · 홍경표<sup>3</sup> · 박정의<sup>3</sup> · 서정돈<sup>3</sup> · 이원로<sup>3</sup>

### Change of Clinical Outcome in Patients with Unstable Angina according to Early Revascularization Therapeutic Strategy

Wook Hyun Cho, MD<sup>1</sup>, Jeong Sik Park, MD<sup>1</sup>, Shin Bae Joo, MD<sup>2</sup>, Jin Ok Jeong<sup>3</sup>,  
 Hyeon-Cheol Gwon, MD<sup>3</sup>, Seung Woo Park, MD<sup>3</sup>, June Soo Kim, MD<sup>3</sup>, Duk-Kyung Kim, MD<sup>3</sup>,  
 Sang Hoon Lee, MD<sup>3</sup>, Kyung Pyo Hong, MD<sup>3</sup>, Jeong Euy Park, MD<sup>3</sup>,  
 Jung Don Seo, MD<sup>3</sup> and Won Ro Lee, MD<sup>3</sup>

<sup>1</sup>Department of Internal Medicine, Seoul Adventist Hospital,

<sup>2</sup>Department of Internal Medicine, Hankook General Hospital, Kwangju,

<sup>3</sup>Division of Cardiology, Cardiovascular institute, Department of Medicine, Samsung Medical Center, College of Medicine, Sungkyunkwan University, Seoul, Korea

#### ABSTRACT

**Background and Objectives** : It has been well known that the Braunwald classification is an appropriate clinical parameter in the prediction of the outcome in patients with unstable angina. However, the ability of the classification to predict prognosis of unstable angina according to treatment strategy is not established. We evaluated the relation between severity of angina on admission and outcome of primary unstable angina with early invasive strategy. **Materials and Method** : 148 patients (M 85, F 63, age 61 ± 10) with suspected unstable angina were divided into three subgroups on the basis of the Braunwald classification on admission. The patients were followed up to 6 months prospectively if the final diagnosis was primary unstable angina. Early invasive strategy was used for the treatment of unstable angina. Major cardiac events were assessed during hospitalization and 6 months follow-up period according to the Braunwald classification. **Results** : Unstable angina was diagnosed in 95 patients (64%). Among these patients, 89 patients with primary unstable angina were followed up to 6 months. Clinical characteristics including number of patients, mean age, sex ratio, risk factors, coronary angiographic findings and revascularization rate during hospitalization were not different in three subgroups of these patients. Among these patients, early coronary revascularizations was performed in 67 patients (75%) and 2 (2%) deaths/myocardial infarctions occurred during hospitalization. During the follow-up period, 1 (1%) myocardial infarction/death and 12 (13%) revascularizations occurred. Cardiac event rate (death, myocardial infarction or revascularization) was not different during hospitalization and 6 months follow-up period among subgroups of severity class. **Conclusion** : Clinical outcome should be reevaluated after early coronary

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: (02) 2210 - 3508 · : (02) 3410 - 0403

E - mail : cwh@unitel.co.kr

intervention to predict cardiac event in patients with unstable angina. (Korean Circulation J 1999;29(11): 1188-1194)

KEY WORDS : Unstable angina · Braunwald classification · Prognosis.

## 서 론

가 89 ( 49 , 40 , 61 ± 10 ) ( , ) .  
( , ) .  
, , ,<sup>1)</sup>  
,<sup>2)</sup> ,<sup>3)</sup> , ,  
ST ,<sup>11)12)</sup>  
24 48 ST ,<sup>13)</sup> , 2  
<sup>2)4)5)</sup> Canadian Cardiovascular Society Cla-  
1989 Braunwald<sup>6)</sup> ssification(CCSC)  
가 CCSC 가  
- 1) 50%  
가 , 2)  
Braunwald  
(severity)  
, , , 가  
- , , 89 82 (92%) , 6  
(7%) , 1 (1%) .

## 재료 및 방법

대상 1997 1 1998 6  
관상동맥의 병변 조사  
50%  
,<sup>8)</sup>  
148 ,  
Braunwald , 가  
(2 , 가  
, (1 complexity 가  
가 : (2 ) , (1 complexity /  
48 ; , .  
, (48 ; , (ACC/AHA)<sup>14)</sup> .  
) , A( ,  
; 입원 중 치료  
, B( ; Braunwald<sup>13)</sup>  
, C( 2 ; , , , , , ,  
) ) 가

70% (44%), 13 (45%)  
 ACC/AHA  
 , TIMI (reference dia-  
 meter), (diameter stenosis)  
 (Table 2).  
 74%(22 / 7 ), 82%(12 / 2 ), 73%(21 / 3 )

19 (51%), 7  
 ACC/AHA  
 , TIMI (reference dia-  
 meter), (diameter stenosis)  
 (Table 2).

입원 중 심장사건

통계 방법

SPSS for windows release 7.5  
 (SPSS Inc., Chicago, IL, U.S.A.)  
 (continuous data) ±  
 (one way ANOVA) , (catego-  
 rical variable)  
 (crosstabulation analysis) (chi -  
 square)  
 p<0.05

1

Table 1. Clinical characteristics of 89 studied patients

	Class (n = 39)	Class (n = 17)	Class (n = 33)	P value
Age(years)	60.6±9.2	59.2±13.3	62.5±8.8	NS
Male gender	19(49)	7(41)	23(70)	NS
Hypertension	23(59)	10(59)	21(64)	NS
Diabetes	8(21)	5(29)	9(27)	NS
Hypercholesterolemia*	7(18)	2(12)	1( 3)	NS
Smoking	10(26)	8(47)	15(45)	NS
Old myocardial infarction	8(21)	4(24)	10(30)	NS

\*Hypercholesterolemia ; Total cholesterol > 240 mg/dL  
 NS : not significant  
 Data presented are number(%) of patients

결 과

추정 불안정형 협심증의 최종 진단

148  
 95 (64%) ,  
 15 (10%), Q 8  
 (5%), 30 (20%)  
 92 , 2 ,  
 1 . 89  
 6 가 .

Table 2. Coronary angiographic findings

	Class (n = 37)	Class (n = 16)	Class (n = 29)	P value
Number of diseased vessel				NS
1 vessel disease	18(49)	9(56)	16(55)	
2 vessel disease	10(27)	4(25)	9(31)	
3 vessel disease	9(24)	3(19)	4(14)	
Morphology of lesion				NS
Type A	7(18)	3(20)	11(38)	
Type B1	15(41)	5(30)	10(35)	
Type B2	13(36)	6(40)	5(17)	
Type C	2( 5)	2(10)	3(10)	
TIMI flow				NS
0	2( 5)	0( 0)	0( 0)	
1	2( 5)	1( 6)	1( 3)	
2	0( 0)	1( 6)	2( 7)	
3	20(90)	14(88)	26(90)	
Reference diameter(mm)	2.9±0.6	3.0±0.7	3.0±0.6	NS
Diameter stenosis(%)	78±10	72±11	73±13	NS

일차성 불안정형 협심증 환자의 기초 임상 특징

(39 ), (17 ), (33 )  
 (Table 1).

관상동맥 조영술에서 병변의 특징

82  
 18 (49%), 9 (56%), 16 (55%)



Braunwald , , 가 , ,  
 가 ST 가  
 64% ,  
 417 가 68%가  
 3)  
 가 75% Owa<sup>10)</sup>  
 (ergonovine) 가  
 10% 가  
 22)  
 van Miltenburg - van Zijl<sup>3)</sup> 6  
 6  
 ST 48 . TIMI IIIB <sup>26)</sup>  
 4)가 24  
 1)4) , , ,  
 1)4)  
 6 ( , 6 가  
 )  
 2)3)7) , 1)3) , 2)3) , 1)7)  
 1)2) , 23)  
 24 가  
 van Miltenburg - van Zijl<sup>3)</sup>  
 49%, 35%  
 가  
 1) , 2) , 1) , 1)2) ,  
 24) 6  
 6  
 , 6  
 Bra - Bra -  
 unwald가 unwald 6  
 35% 43% van  
 Miltenburg - van Zijl<sup>3)</sup> Clavin<sup>25)</sup> Braunwald

Braunwald

요 약

연구배경 :

Braunwald

대상 및 방법 :

1997 1 1998 6

148

Braunwald

95 (64%) 가

6

결 과 :

6 가 89

(39 ), (17 ), (33 )

( ) ( / ) 74%(22 / 7 ), 82%(12 / 2 ), 73%(21 / 3 )

(2%), 6

(1%), 12 (13%)

6

결 론 :

중심 단어 : Braunwald

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