

허혈성 심부전증에 대한 안지오텐신 수용체 길항제와 이뇨제 복합제인 Hyzaar®의 임상 효과

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The Clinical Effects of a Combined Agent Including Losartan and Hydrochlorthiazide, Hyzaar®, in Patients with Ischemic Heart Failure

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ABSTRACT

Background and Objectives : Angiotensin converting enzyme inhibitor is known to be effective in the prevention of left ventricular remodeling following myocardial infarction. However, little data is available concerning the clinical effects of angiotensin (AT) receptor blocker in ischemic cardiomyopathy. This study evaluated the clinical effects of the concomitant use of losartan with low doses of hydrochlorthiazide in cases of ischemic cardiomyopathy. **Subjects and Methods :** A combined agent of 50 mg of losartan potassium with 12.5 mg of hydrochlorthiazide (HCTZ) was administered once daily over a 12-week period to 29 patients (M : F = 26 : 3, 61.4 ± 8.7 years) who were diagnosed with ischemic heart failure (ejection fraction lower than 50% by echocardiography) at Chonnam National University Hospital. **Results :** Clinical symptoms of dyspnea in the 29 patients improved from 2.08 ± 0.49 to 1.15 ± 0.38 as measured by New York Heart Association class. The systolic and diastolic blood pressure did not change significantly following treatment (116.5 ± 18.0/77.0 ± 11.9 mmHg vs. 118.7 ± 15.1/78.1 ± 11.1 mmHg). The ejection fraction following administration of Losartan/HCTZ increased from 40.3 ± 8.1% to 46.7 ± 10.8% (p = 0.001). Losartan/HCTZ was well tolerated in all patients without significant adverse effects or laboratory changes. **Conclusion :** A fixed combination of losartan and low dose hydrochlorthiazide is effective in patients with ischemic heart failure. (**Korean Circulation J 2002;32(4):349-354**)

KEY WORDS : Angiotensins ; Diuretics ; Myocardial infarction ; Heart failure, congestive.

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서 론

(RAS : renin - angiotensin system) II

¹⁾ RAS

(ACEI : angiotensin converting enzyme inhibitor) 1970

, ACEI bradykinin, substance P 가

²⁾³⁾ Vasoconstrictor, neural, growth - promoting action Angiotensin II(AT II) hi - gh affinity

AT1

II

RAS

II

⁴⁾

, hydrochlorthiazide

AT1

Losartan

hydrochlorthiazide

Hyzaar[®]

, Hyzaar[®]

대상 및 방법

대상 환자

2000 7

2001 3

18

75

mpson

14 , 30% 1)

Modified Si -

50%(40%

29 (26 ,

3 , 61.4 ± 8.7)

방 법

1

ACEI

, Hyzaar[®] 1 (Losartan 50 mg + Hydro - chlorthiazide 12.5 mg)

, blood urea nitrogen, , Na, K, Cl, Ca, P, asp - artate transaminase, alanine transaminase, alkaline phosphatase, lactic dehydrogenase, creatine kinase, creatinine

가 4 8

NYHA(New York Heart Association) class

. 12

12 NYHA class 1.15 ± 0.38
($p = 0.001$)(Table 2).

결과 분석

paired t - test
p 0.05
SPSS 7.5

결 과

임상적 특성

29 , 12
2 27 .
61.4 ± 8.7 , 26 ,
3 9 (31.0%), 59.4 ± 6.8 mm,
7 (24.1%), 22 (75.9%), 58.3 ± 8.6 mm
10 (34.5%) (Table 1).
14 (48.3%),
furosemide 19 (65.5%),
4 (13.8%)

임상증상

NYHA class 2.08 ± 0.49 ,

Table 1. Baseline clinical characteristics

Age (years)	61.4 ± 8.7
Sex (Male : Female) (%)	26 (89.7) : 3 (10.3)
Risk factors (%)	
Hypertension	32.0
Diabetes mellitus	23.1
Smoking	76.9
Hyperlipidemia	36.0

혈압의 변화

116.5 ± 18.0 mmHg,
77.0 ± 11.9 mmHg , 4 110.0 ± 6.3 mmHg,
70.0 ± 11.0 mmHg, 8 114.6 ± 12.1 mmHg, 77.3 ±
7.9 mmHg, 12 118.7 ± 15.1 mmHg, 78.1 ± 11.1
mmHg (Table 2)(Fig. 1).

심조음파도에 의한 심장기능의 변화

40.3 ± 8.1% ,
46.7 ± 10.8%
가가 ($p = 0.001$). M
59.4 ± 6.8 mm, 58.3 ± 8.6 mm
가 .
45. 9 ± 6.9 mm, 42.3 ± 8.4 mm
가 ($p = 0.038$)(Table 2)(Fig. 2).

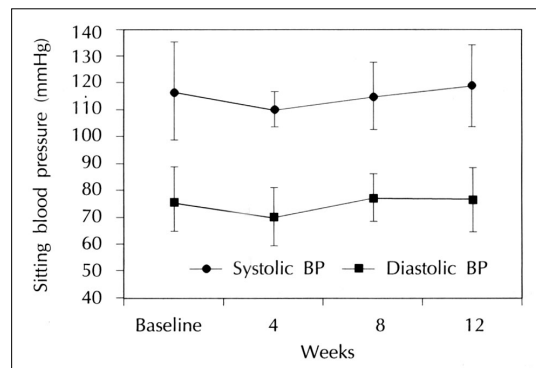


Fig. 1. Systolic and diastolic blood pressures were not changed at baseline, 4 weeks, 8 weeks, and 12 weeks after 50 mg of Losartan and 12.5 mg of hydrochlorothiazide.

Table 2. Changes of clinical and echocardiographic findings before and after treatment

	Baseline	12 weeks	
New York Heart Association class	2.08 ± 0.49	1.15 ± 0.38	0.001
Systolic blood pressure (mmHg)	116.5 ± 18.0	118.7 ± 15.1	NS
Diastolic blood pressure (mmHg)	77.0 ± 11.9	78.1 ± 11.1	NS
Ejection fraction (%)	40.3 ± 8.1	46.7 ± 10.8	0.001
Left ventricular end-diastolic dimension (mm)	59.4 ± 6.8	58.3 ± 8.6	NS
Left ventricular end-systolic dimension (mm)	45.9 ± 6.9	42.3 ± 8.4	0.038

NS : not significant

가

요 약

II 가

¹⁹⁾

II

candesartan cilexetil, irbesartan,

losartan, telmisartan, valsartan

가

²⁰⁾²¹⁾

II

II

II가

II

losartan

가

가

²²⁻²⁴⁾

²⁵⁾

losartan

fosinopril

, ⁴⁾ 50 mg

100 mg losartan

90%

, losartan

flat dose response

curve

50 mg

가

²³⁾

ACEI

losartan ACEI

⁴⁾

4

rtan

hydrochlorthiazide

Hyzaar[®]

가

배경 및 목적 :

Losartan AT1

AT II

, ACE

- ACE

dependent pathway

AT II

. Losartan

가

Losartan Hydrochlorth -

iazide

Hyzaar[®]

방 법 :

18

75

Modified Simpson

50%

29 (61.4 ± 8.7 ,

26) 12 Hyzaar[®] 1 (Losar -
tan 50 mg + Hydrochlorthiazide 12.5 mg)

결 과 :

NYHA class 2.08 ± 0.49 ,

12 NYHA class 1.15 ± 0.38

(p=0.001).

116.5 ± 18.0 mmHg,

77.0 ± 11.9 mmHg

118.7 ± 15.1 mmHg, 78.1 ± 11.1 mmHg

40.3 ± 8.1% ,

12

46.7 ± 10.8%

가가

(p=0.001).

59.

4 ± 6.8 mm,

58.3 ± 8.6 mm

가 ,

45.9 ±

6.9 mm,

42.3 ± 8.4 mm

가

(p=0.038).

결 론 :

Hyzaar[®] 1 1

중심 단어 : ; ; ; .

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