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# 고혈압 치료에 있어서 ACE 저해제와 Losartan

## 유 언 호

### ACE Inhibitors and Losartan in the Management of Hypertension

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Angiotensin	(ACE inhibitor)		8)		
	. ACE	Losartan potassium			
	,	placeb	losartan po-		
,	,	tassium	,		
		. (fir	rst - dose hypotension)		
		. , ACE inhibitor			
p15 참조		ı	olacebo		
. angioedem	a, (renal	,			
dysfunction), (cough)		<sup>3-7)</sup> . 가			
	1 - 7)				
Losartan potassium		,			
nonpe	ptide angiotensin II	. Losartar	potassium hydrochlo -		
(AII) receptor antagonist	. All sub-	rothizide	losartan potassium		
type 1(AT₁) receptor		placebo	. Angiotensin		
AII		II(AII) subtype 1 recept	or(AT₁) AII		
E3174					
	1 1	, , Na/	,		
24 .					
, losartan potassium	50 100mg 1 1		. Losartan potassium		
enalapril, atenolo	ol felodipine ex -	AT₁ receptor			
tended release(ER)	가	AII .	E3174		
. Losartan potassium h	ydrochlorothiazide		10		
		AT₁ receptor	. AII		
	1/3		15 20		

8).			. kininogen - kinin(bradykinin) system				
losartar	tan potassium		7	가	, <i>A</i>	ACE(kinin	ase)
renin	AII			bradykini	n	가	
aldosterone	, bradykinin		. Bradykir	nin		pro - infla	ammatory
			peptides(	substance	P, neui	ropeptide	Y)
LVH				histamin	е		
	가		cough	reflex h	nypersen	sitivity	
, stroke			Angioneuroti	ic edema			9).
가 model							•
fibrinoid necrosis		8).					. Ca
losartan potassium		stero	id	(indome	ethacin	sulindac)	
						histam	ine
uricosuric effect				가			
					9).		
losartan potassion	ım	NIDDM	(pl	acebo con	trol	)	(14%)
proteinuria	. lip	ids/lipo -	felodipine Ef	R ,	(7.4%	,)	(4.4%)
proteins			atenolol	losartan	potassiu	m	
1,8)			. Li	iver enzyı	me		
Losartan potassium	E3174					8).	
			Dose - find	ling studie	s	losarta	an 1 1
			50mg				100mg
가 ,						,	
8)				8 12			
2800		ole - blind	8 13	•			trough
trials losartar	potassium		perc	centage re			
	(5.50)	(			-		enalapril
	(6.5%),	(4.1%),			₹		. Lo-
·	3.1%) .		sartan potas	ssium	8)	1	
, placebo	losartan pot	assium	6	(	-		
	,	<b>5</b> 0	12			arative st	
	(	50mg	hudrooblorot			sartan po	
0.5%) <sup>8)</sup> .		71	hydrochlorot		-	25mg	)
ACE	notopoium/2 10/	가 '\	,		-	otassium	n ahannal
, losartan potassium(3.1%) placebo(2.6%)		, blooker		lol /		n channel	
. ACE		losartan	blocker	. L	usarian p	ootassium	10mmUa
potassium(17 29%), pl	acobo (35%)		Loca	rtan notae	scium	hydrochlo	18mmHg rothiazide
drochlorothiazide (25 34	` '	hy -	. LUSa	iriaii pula	ooiuill	i i y u i OGI IIC	n oti ilazide
lisinopril(62	•			1 6	mmHg		
1,3 - 7)	. 12/0]		felodipir		illii iy	가	8)
•			reiouipii	IIG LIX	losarta	an potassi	•
					iosai la	potassi	uiii

8)

		-	-	
1	100mg			

50ma

25mg .

. 1 25mg <sup>8)</sup>. creatinine 2mg/dl ACE . fosinopril ,

creatinine

ACE 가 AII 가 , prejunctional neuronal AII type 1

receptors , ACE

. ACE

renin - angiotensin

( angioedema ) AII

. ACE renin - angiotensin

AI AII .

renin - angiotensin metabolic pathway AII 가

ACE

AII가

AII 가 ACE

AT<sub>1</sub> receptor antagonist

ATT Teceptor amagonis , .

, 가 . Losartan

,

#### References

- 1) 박대균·이명묵·채인호·이무용·김효수·손대원·오병희·박영배·최윤식: 로자탄 대 포시노 프릴의 고혈압환자들에서 항고혈압 효과, 안정성 및 내약성의 비교. 순환기 28(1), 1998
- 2) Pitt B: Importance of angiotensin-converting enzyme inhibitors in myocardial infarction and Congestive heart failure: Implications for clinical practice. Cardiology 86 Suppl 1: 41-45, 1995
- 3) Lacourciere Y, Lefebvre J: Modulation of renin-angiotensin-aldosterone system and cough. Can J Cardiol 11 suppl F: 33F-39F, 1995
- 4) Chan P, Tomlinson B, Huang TY, Ko JT, Lin TS, Lee YS: Double-blind comparison of losartan, lisinopril, and metolazone in elderly hypertensive patients with previous angiotensin-converting enzyme inhibitor-induced cough. J Clin Pharmacol 37 (3): 253-257, 1997
- 5) Ramsay LE, Yeo WW: ACE inhibitors, angiotensin II antagonists and cough. The Losartan Cough Study Group. J Hum Hypertens suppl 5: S51-S54, 1995
- 6) Lacourciere Y, Lefebvre J, Nakhle G, Faison EP, Snavely DB, Nelson EB: Association between cough and angiotensin converting enzyme inhibitors versus angiotensin II antagonists: The design of a prospective, controlled study. J Hypertens suppl 12 (2): S49-S53, 1994
- 7) Markham A, Goa KL: Valsartan. A review of its pharmacology and therapeutic use in essential hypertension. Drugs 54 (2): 299-311, 1997
- 8) Goa KL, Wagstaff AJ: Losartan potassium; A review of its pharmacology, clinical efficacy and tolerability in the management of hypertension. Drugs 51 (5): 820-845, 1996
- 9) Karlberg BE: Cough and inhibition of renin-angiotensin system. J Hypertens suppl 11: (3): S49-S52, 1993
- 10) Pitt B: ACE inhibitors in heart failure: Prospects and limitation. Cardiovasc Drugs Ther 11 suppl 1: 285-290, 1997
- 11) Pitt B, Segal R, Martinez FA, Meurers G, Cowley AJ, Thomas I, Deedovania PC, Ney DE, Snavely DB, Chang PI: Randomized trial of losartan versus captopril in patients over 65 with heart failure. Lancet 15: 349 (9054): 747-752, 1997
- 12) Rush JE, Rajfer SI: Theoretical basis for the use of angiotensin II antagonists in the treatment of heart failure. J Hypertens suppl 11 (3): \$69-\$71, 1993