

관상동맥질환의 위험인자 및 1, 2차 예방

Risk Factors and Primary and Secondary Prevention of Coronary Heart Disease

2가 50

Shung Chull Chae, M.D.

Department of Internal Medicine / Division of Cardiology

Kyungpook National University College of Medicine & Hospital

E-mail : scchae@knu.ac.kr

가 , 가 .

Abstract

Atherosclerosis is a major cause of coronary heart disease. Many clinical characteristics and laboratory parameters are known to be related with atherosclerosis and/or coronary heart disease, either epidemiologically or causally. Although the risk to develop cardiovascular disease (CVD) is on a continuum, the risk factor modification was traditionally categorized into primary or secondary prevention based on the presence of clinical CVD. Mega-trials of the primary and secondary prevention have been reported rendering the previous recommendations obsolete. Several guidelines, including the Adult Treatment Panel III, JNC-VII, and the European and British guidelines, were recently released for dyslipidemia and hypertension. Global assessment of CVD risk with multiple risk factors, rather than risk assessment by an individual risk factor is adopted in all of the current guidelines. Absolute risk levels are used for setting of a target level of a given risk factor and for selection of intervention modalities. Complete cessation of smoking, control of dyslipidemia, hypertension, diabetes, and body weight, moderation of alcohol consumption, and guided use of certain medications have been recommended. The hormone replacement therapy was believed to be cardioprotective and recommended for the primary and secondary prevention of coronary heart disease. However, it is no longer recommended for the purpose of the prevention of coronary heart disease. The concept of "the more, the better" is recommended for exercise. Guidelines are ever so changing!

Keywords : Atherosclerosis; Coronary heart disease; Primary prevention; Secondary prevention; Risk factor

: ; (); ; ;

.
가 .
, (foam cell)
가 . 가
“ ” 가
(response to injury hypothesis)
가 가 (1).

“ (risk factor)” (coherence) :
가 , , 가
. .
. .
(specificity) : 가
. .
“ 가
” 가 :
가 가 가 .
, ,
. ,
가 , 가 .
, , 가
가 (2, 3). 가
: 가 .
가 :
가 .
: 27 Bethesda
. 4 (1)(4).
(case control study) , 가 , , 가
: .
, ,
. 1.
: 가 . 가 ,

1.

1 (가)					
LDL -	+++	++	+++	+++	++
	+++	+++	+++	++	+++
	+++	++	++	++	-
	+++	+++	+++	+	+++
	+++	()	++	-	++
	+++	+++	+	+	+++
	()	(, warfarin)	()		(, warfarin)
2 (가 가)					
HDL - ; small dense LDL	+++	+	+++	++	+++
	+++	++	++	++	-
	+++	+	+++	++	+
	++	++	+++	++	+++
	+++	-	+++	++	+
	+++	-	+++	-	+++
3 (가 , 가)					
Lipoprotein(a)	++	+	+++	+	-
	+	-	+	-	+
	++	-	+	++	++
	+	-	-	+	++
	+++	-	++	++	-
4 (가)					
가	+++	-	+++	-	-
	+++	-	+++	-	-
	+++	-	+++	-	-
	+++	-	+++	-	-

+ ; ++ ; +++ ; - ; 가

HDL , “Small dense LDL”
 (fibrinogen) 가 , 가
 .
 LDL
 2. 가 .
 LDL -
 . LDL - 가 3.
 , (plaque) , 가 .
 가
 HDL - 가 , 가,
 . LDL - 가, 가,
 . HDL -
 (reverse choleste
 rol transport) LDL 4.
 .
 2~3 , 3~5
 가 (5). 가 .
 가 HDL , lipo-
 protein remnant particle 가, small dense LDL
 가, lipoprotein(a) 가, 가, LDL
 Lipoprotein(a) apolipoprotein(a) 가 LDL
 . Apolipoprotein(a) plasminogen
 가 15~40 kringle IV
 . Lipoprotein(a)
 . Framingham
 Heart Study Lipopro- 5.
 tein(a) 가 가 2
 (6~8). 가 가 .
 (9).

9.

1.

2. LDL

		LDL (mg/dL)	LDL (mg/dL)	LDL (mg/dL)
	가	< 100	≥ 100	≥ 130 (100~129)
(10	> 20%)			
2 가		< 130	≥ 130	10 10~20% : ≥ 130
(10	≤ 20%)			10 < 10% : ≥ 160
	가1	< 160	≥ 160	≥ 190 (160~189)

가 ” (7).

- 1) . 35 statin
3 ~ 5 .
가 .
- 2) HDL -
lovastatin AFCAPS/TexCAPS
HMG - CoA reductase LDL -
(primary endpoint) 가
. 1971 (8).
(stroke) Adult Treatment Panel - III
(9)(2).
(5, 6).
“ (confounding) 3)
140/90 mmHg

130/85 mmHg
130/80 mmHg
5~6 mmHg
35~40%, 30 (2, 4),
20~25% 17
5~6 mmHg 6)
38%, 16% 가
4) 가
(18.5~24.9 kg/m²)
7)
(가
40~60%) 가 30 Women's Health Initiative
1 3~5
(60%) (12).
(resistance training) 1 2 8)
British Male Doctor
가
5) Physicians' Health Study 22,071
325 mg
가 44% (13, 14).
6 가
가
HDL - 가 (15). 10
가 10%

9) 110 mg/dL, HbA1c 7% mg/dL 40% 200 (16, 17).
HDL - 가 ,
LDL - cholesterol
HDL - cholesterol
200 mg/dL -
HDL(HDL -)
130 mg/dL .
 ,
 ,
 ,
4)
1) 가(가)
 . 1 3~4 (가
50%) 30 .
2) .
 .
20~25%
3) LDL 100 mg/dL , 5)
HDL 40 mg/dL .
LDL 120% ,
가 ,
LDL HDL ,
 ,
18.5~24.9 kg/m²
HDL -
Gemfibrozil VA - HIT
6)
(antiplatelet agents/anticoagulants)
가 , Bezafibrate BIP 75~325 mg

. clopidogrel
75 mg warfarin .
warfarin , 1981 Hopkins Williams
clopidogrel INR 2~3.0 246가 (21).
warfarin . 가

7)
(angiotensin - converting enzyme inhibitors)
가 ,
, Killip class 가 ,
가 . HOPE PRO-
GRESS 가

8) (beta - blockers)
가 , 가 .

9)
HERS(The Heart and Estrogen/progestine Re-
placement Study) ERA(The Estrogen Replace-
ment and Atherosclerosis)
가
가
(18~20).

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