

PLASMA PROTEIN C-LEVELS CORONARY HEART DISEASE AND MYOCARDIAL INFARCTION

**Submitted for Master Degree
in Biochemistry**

By

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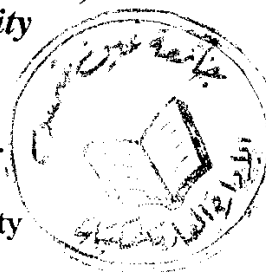
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THE PLASMA PROTEIN C-LEVEL WITH CORONARY HEART DISEASE AND MYOCARDIAL INFARCTION

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ABSTRACT

Several population studies have shown the risk factor cause of coronary heart disease but here we studied the correlation between protein C which act as anti coagulant factor and another hemostatic factor, also between lipid profil.

To evaluate the correlation between plasma protein C levels with cardiovascular risk factors in cases of coronary heart disease and myocardial infarction, we used different parameters to measured this relation such as:-

(1) coagulation factor (prothrombin time, partial thromboplastin time, fibrinogen and protein C).

(2) The activity of the cardiac enzyme (creatin phosphokinase, creatine phosphokinase-MB and lactate dehydrogenase).

(3) Lipid profil (total lipid, phospholipid, triglycénide, total cholesterol, cholesterol-low density lipoprotein, cholesterol-high density lipoprotein).

This study includes 60 subjects which classified into 3 group according to clinical examination, 20 cases suffering from ischemic heart disease, 20 cases suffering from myocardial infarction and 20 healthy cases used as control group.

In our results demonstrated significant decreased level of protein C in ischemic heart disease and in myocardial infarction groups, when compared to control groups.

Protein C levels were negatively correlated with hemostatic factor in each groups, also negatively correlated with lipid profil in ischemic heart disease and myocardial infarction but positively correlated with lipid profil in control group.

LIST OF ABBREVIATIONS

Ala	Alanine
APC	Activated protein c.
apo A	Apolipoprotein a
apo AI	Apolipoprotein AI
apo B	Apolipoprotein B
apo E	Apolipoprotein E
APTT	Activated partial thromboplastin time
Arg	Arginine
Asp	Aspartic Acid
Ca ++	Calcium Ions
CHD	Coronary Heart Disease
CPK	Creatine Phosphokinase
Factor II	Prothrombin
FIX	Christmas Factor
FV	Proaccelerin
FVII	Proconvertin
FVIII	Antihemophilic Factor (AHF)
FXII	Hegman Factor(HF)
FXIII	Fibrin Stabilizing Factor
Glu	Glutamic Acid
Gly	Glycine
HDL	High Density Lipoprotein
His	Histidine
HMWK	High Molecular Weight Kininogen
IHD	Ischemic Heart Disease
LDL	Intermediate Lowdensity Lipoprotein
Ile	Isoleucine
IM	Intramuscular
LCAT	Lecithin Cholesterol Acyltransferase
LDH	Lactate Dehydrogenase
LDL	Low Density Lipoprotein
Leu	Leucine
Lys	Lysine
Meth	Methionine
MI	Myocardial Infarction

PAI	Plasminogen Activator Inhibitor
PC	Protein C
Phe	Phenylalanine
Pro	Proline
PT	Prothrombin Time
Ser	Serine
t-PA	Tissue Plasminogen Activator
TAG	Triacylglycerols
TF	Tissue Factor
Thr	Threonine
Trp	Tryptophan
Tyr	Tyrosine
Val	Valine
VLDL	Very Low Density Lipoprotein
vWF	van Willebrand Factor

LIST OF FIGURES

Number	Title	Page
Fig. (1)	Mechanisms of production of atheroma.	4
Fig. (2)	Aschematic diagram for the process of atherosclerosis.	5
Fig. (3)	Generalized structure of a plasma lipoproteins.	11
Fig. (4)	Molecular mechanisms of platelet attachment to vascular subendothelium (platelet adhesion) and platelet-platelet interactions (platelet aggregation) in a cross-sectional view of a blood vessel.	21
Fig. (5)	The coagulation cascade.	22
Fig. (6)	The prothrombinase complex.	24
Fig. (7)	Partial structure of human protein C.	29
Fig. (8)	Comparison of NH ₂ -terminal amino acid sequences of factor N, IX, X, protein C, and factor vii.	31
Fig. (9)	Amino-terminal sequences of prothrombin, factor IX, factor X, factor VII, protein C and protein S.	32
Fig. (10)	Thrombin has multiple effects on coagulation.	36
Fig. (11)	Schematic diagram of the human factor V molecule.	45
Fig. (12)	Factor VIII and its gene.	47
Fig. (13)	The extent of thrombosis is determined by the balance among coagulant, anticoagulant and fibrinolytic mechanisms.	51
Fig. (14)	The activity of prothrombin time (seconds) in the plasma of control and different studied groups.	90

Number	Title	Page
Fig. (15)	The activity of prothrombin concentration in plasma of control and different studied groups.	92
Fig. (16)	The activity of partialthromboplastin time (seconds) in the plasma of control and ischemic heart (GII) and Myocardial infarction (GIII).	94
Fig. (17)	The plasma fibrinogen mg% in control group, Ischemic heart GII, and Myocardial infarction GIII.	96
Fig. (18)	The activity % of protein C in the plasma of control and different studied groups.	98
Fig. (19)	The activity of the enzyme creatine phosphokinase u/l in control and different studied groups.	100
Fig. (20)	The activity of the enzyme creatine phosphokinase MB u/l in control group and different studied groups.	102
Fig. (21)	The activity of the enzyme lactate dehydrogenase u/l in control and different studied groups.	104
Fig. (22)	Serum total lipid mg% in control group and different studied groups.	106
Fig. (23)	The serum phospholipid in control group and different studied groups.	108
Fig. (24)	The serum triglyceride mg% in control group and different studied groups.	110
Fig. (25)	The serum total cholesterol in control group and different studied groups.	112