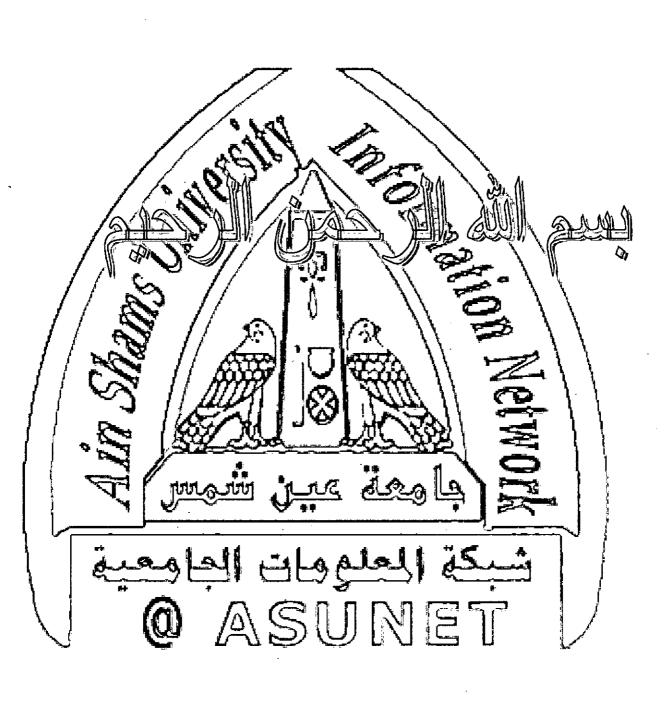


شبكة المعلومات الجامعية





شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



بعض الوثائق الاصلبة تالفة

THE STUDY OF TRIGLYCERIDE AND C-REACTIVE PROTEIN LEVELS IN SUBCLINICAL ATHEROSCLEROSIS IN TYPE 2 DIABETES MELLITUS

Thesis

Submitted in Partial Fulfillment of M.Sc.

Degree in Internal Medicine

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DEDICATION TO MY MOTHER

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LIST OF ABBREVIATIONS

ACE : Angiotensin converting enzyme ADA : American diabetes association AGE : Advanced glycation end products

AHCPR: Agency for health care policy and research

APO-A1: Apolipoprotein A1
APO-A2: Apolipoprotein A2
APO-E: Apolipoprotein E
AT-1: Angiotensin Type-1
BMI: Body mass index

CAD : Coronary artery disease
CCA : Common carotid artery
CHD : Coronary heart disease

CRP : C-reactive protein

CT : Computed tomography

DCCT: Diabetes control and complication trial.

DNA : Deoxy ribo-nucleic acid

ECG : ElectrocardiogramECM : Extra-cellular matrixESRD : End stage renal diseaseFPG : Fasting plasma glucose

G6PD : Glucose 6 phosphate dehydrogenase

GT : Guanine thiamine

HB-EGF: Heparine binding epidermal growth factor HDL-C: High density lipoprotein-cholesterol

HMG-CoA: 3-hydroxy-3-methyl glutaryl coenzyme A

HNF-1α: Hepatocyte nuclear factory-1 α.
 HRT: Hormonal replacement therapy
 ICAM-1: Intercellular adhesion molecule-1
 IDDM: Insulin dependent diabetes mellitus

IGF-1 : Insulin like growth factor

IgG : Immunoglobulin G

IGT : Impaired glucose tolerance

IL-6 : Interleukin-6

IMT : Intimal medial thickness

IRAS : Insulin resistance atherosclerosis study

IRS : Insulin resistance syndrome LDL : Low density lipoprotein

LPL: Lipoprotein lipase

MCP-1 : Monocyte chemotactic protein-1 MODY : Maturity onset diabetes of the young MRA: Magnetic resonance angiography

mRNA : Messanger ribonucleic acid NDDG : National diabetes data group

NIDDM: Non-insulin dependent diabetes mellitus NPDR: Non-proliferative diabetic retinopathy.

OGTT: Oral glucose tolerance test

PAI-1 : Plamsinogen activator inhibitor-1

PPAR-y: Peroxisome Proliferator Activated Receptor-Gamma.

PDGF: Platelet derived growth factor
PDR: Proliferative diabetic retinopathy
2hr PPG: 2 hours post prandial plasma glucose

PVD : Peripheral vascular disease

SAP : Serum amyloid P

SHEP : Systolic hypertension in the elderly program

SMCs : Smooth muscle cells.TC : Total cholesterolTG : Triglycerides

TGF-β : Transforming growth factor β
 TNF-α : Tumour necrosis factor alpha.
 TPA : Tissue plasminogen activator

UKPDS: United Kingdom prospective diabetes study.

VCAM-1: Vasculary cell adhesion molecule-1 VEGF : Vascular endothelial growth factor

VLDL : Very low density lipoprotein

W/H : Waist to hip ration
WBCs : White blood cells

WESDR: Wisconsin epidemiologic study of diabetic retinopathy

WHO: World health organization

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INTRODUCTION

The conventional risk factors for atherosclerosis include elevated LDL-C, low HDL-C, high triglycerides, hypertension, diabetes, smoking, age and post-menopausal state. Novel serum markers, including C-reactive protein (CRP) and homocysteine, have the ability to gauge risk in individual patients. A number of non-invasive imaging modalities have the potential to measure and to monitor atherosclerosis in asymptomatic individuals and include exercise ECG testing, electron beam CT, MRA, positron emission tomography and high resolution ultrasound to measure carotid initimal-medial thickness (*Pearson and Thomas, 2002*).

Inflammation plays a key role in the pathogenesis of atherosclerosis. CRP has been found to predict cardiac events in healthy subjects and in patients with coronary atherosclerosis. Elevated CRP is an independent predictor of carotid plaques. Body mass index, HDL-C, triglycerides, diabetes and hypertension are significant determinants of CRP (*Blackburn*, 2001).

Teno et al. (2000) stated that hypertriglyceridemia may be an independent risk factor for early atherosclerosis in type 2 diabetes.

Pradhan et al. (2001) reported that elevated levels of CRP and IL-6 predict the development of type 2 diabetes mellitus and this supports the possible role of inflammation in diabetogenesis.