

Dedication

To my husband, Parents, sisters, brothers, and friends I dedicate
this work.

Gihan

Acknowledgments

I would like to extend my thanks to all individuals who shared with me their knowledge and experience which has been a great help to me.

I thank everybody who contributed to the success of this work in particular, I express my sincere gratitude to my supervisor, Dr. Bader Eldien Hassan Alabid , for his expert supervision, fruitful guidance , unlimited assistance , encouragement and sustained interest throughout the course of this work.

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Gihan

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Abstract

A cross-sectional study conducted during the period from September 2009 to May 2010, compared plasma levels of total cholesterol, triglycerides, HDL-cholesterol and LDL-cholesterol of 40 patients with diabetes mellitus type2 associated with ischemic heart disease as a study group and 30 patients with diabetes type2 without ischemic heart disease as a control group. The study group was chosen from diabetic patients admitted to the intensive care unit (ICU) of Alshaap and Omdurman Teaching Hospitals for at least 5 days, and the control group was selected from diabetic patients on regular follow up in the above mentioned hospitals.

The plasma levels of total cholesterol, triglycerides, LDL-cholesterol and HDL-cholesterol showed no significant difference ($p>0.05$) when the study group was compared to the control group.

In patient with diabetes mellitus type2 associated with ischemic heart disease the plasma levels of total cholesterol, triglycerides, LDL-cholesterol were positively correlated with the duration of diabetes mellitus whereas there is no correlation between the plasma of the HDL-cholesterol and the duration of the disease.

From this study, it concluded that, in Sudanese patients with ischemic heart disease due to diabetes mellitus type2 and on glycemic control their plasma lipid profile is not significantly affected. The duration of diabetes mellitus type2 has positive correlation with the plasma levels of total cholesterol, triglycerides and plasma levels of LDL-cholesterol but has no correlation with the plasma levels of HDL-cholesterol.

بسم الله الرحمن الرحيم

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أجريت هذه الدراسة المقطعية خلال الفترة من سبتمبر 2009 حتى مايو 2010 حيث تمت مقارنة مستويات الدهون المختلفة في بلازما الدم (الكوليسترول الكلي ، ثلاثي الجليسرايد، البروتينات الدهنية ذات الكثافة العالية وكذلك ذات الكثافة المنخفضة) عند 40 من مرضى السكري من النوع الثاني الذين يعانون من نقص الاوكسجين القلبي مع 30 من المرضى المصابين بالسكري من النوع الثاني كمجموعة ضابطة . تم إختيار مجموعة الاختبار من مستشفى ام درمان التعليمي ومستشفى الشعب التعليمي من قسمي العناية المكثفة ، وتم إختيار المجموعة الضابطة من زوار المستشفى ل قسم السكري للمتابعة الدورية من المستشفيات اعلاه .

أظهرت الدراسة أنه ليس هناك فرق ذو دلالة معنوية حيث كان الاحتمال الاحصائي للمقارنة أعلى من 0.05 في كل من المستويات الوسيطة للكوليسترول الكلي وثلاثي الجليسرايد وكذلك البروتينات الدهنية ذات الكثافة العالية والكثافة المنخفضة .

من هذه الدراسة وجد ايضاً ان فترة الإصابة بالسكري ترتبط ارتباطاً موجباً مع كل من مستوى الكوليسترول الكلي وثلاثي الجليسرايد ومستوى الكوليسترول منخفض الكثافة . كما أن فترة الإصابة ليس لها أي ارتباط مع مستوى الكوليسترول عالي الكثافة .

ABBREVIATIONS

CAD	Coronary Artery Disease
CHD	Coronary Heart Disease
CVD	Cardiovascular Disease
DKA	Diabetic Ketoacidosis
DM	Diabetes Mellitus
GDM	Gestational Diabetes Mellitus
HDL	High Density Lipoprotein
HHNC	Hyper- osmolar Hyperglycemic Non-ketotic coma
LDL	Low Density lipoprotein
MRDM	Malnutrition Related Diabetes Mellitus
TG	Triglycerides

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