Dedication

To my father ……

To my mother……

To my sisters……

To my brother……

To my dear husband…..

Hiba

Acknowledgments

My first thankful is to Allah, and then to my supervisor Dr.Badr Eldin H.Elabid for his precious advice and guidance throughout this study. Thanks and regards were extended to the staff of the clinical chemistry department, Rabit teaching hospital for there continues support and in encouragement. I affirm my thanks to Nehal Ali Abu Elgasem for helping in statistical analysis.

Abstract

A cross sectional study conducted IN KHARTOUM STATE during the period from May 2011 to June 2011 for assessment of the serum levels of total cholesterol, triglycerides, HDL-Cholesterol and LDL-cholesterol of 50 hypertensive patient enrolled in the study as a test

group , and 50 apperently subjects as a control group for comparison .

The serum lipid profiles for both the test group and the control group, were processed using enzymatic methods spectrophotometer from Biosystem Company.

The data was analyzed and the results show that the means of the serum levels of total cholesterol ,low density lipoprotein and triglycerides of the hypertensive group are significantly raised ,but the mean of the serum levels of high density lipoprotein is significantly reduced when in comparison with apparently healthy (non-hypertensive) subjects.

In conclusion: Hypertensive patients have raised serum levels of total cholesterol , LDL and triglycerides where as the mean of the serum levels of HDL is significantly reduced ,this dislipideamia shows weak correlation with the duration of hypertension and the body weight.

مستخلص الدراسه

أجريت هذه الدراسة المقطعية في ولاية الخرطوم خلال الفترة من مايو 2011 الى يونيو 2011 لتقييم مستويات المصل من الكلوسترول الكلي والدهون ثلاثية الجلسرايد والكلوسترول عالي الكثافه والكلوسترول منخفض الكثافه عند 50 من المرضى المصابين بارتفاع ضغط الدم سجلوا في الدراسة كمجموعة اختياريه و 50 اصحاء كمجموعة قياسيه لمقارنة مستوى الدهون في مصل الدم .

اختبر مصل الدم في كل من المجموعتين الاختبارية والقياسية لتحديد الدهون في استعمل طريقة انزيمية باستخدام جهاز spctorphotometer من شركة Biosystem .

تم تحليل البيانات وتظهر النتائج زيادة بشكل كبير في متوسط مستويات الكلوسترول الكلي ، ثلاثي الجلسرايد و الكلوسترول منخفض الكثافة ، ولكن هنالك انخفاض كبير في متوسط الكلوسترول عالي الكثافة عند مقارنة مع اصحاء (غير ارتفاع ضغط الدم).

من هذه الدراسه نلخص الى ان هنالك زيادة في نسبة الكلوسترول الكلي ,والدهون ثلاثية الجلسرايد و الكلوسترول منخفض الكثافة ,حيث كما هو انخفاض كبير في متوسط مستويات المصل من الكلوسترول عالي الكثافة ، وهذا الاضطراب في مستويات الدهون له علاقة ضعيفة بالسمنه وفتره مده المرض.

Abbreviations

Apo-A	Apolipoproein A.
Apo-B	Apolipoproein-B
CHD	Coronary Heart Disease
FH	Familial Hypercholesterolemia
HDL-C	High Density Lipoprotein Cholesterol
IDL-C	Intermediate Density Lipoprotein Cholesterol
LDL-C	Low Density Lipoprotein Cholesterol
LPL	Lipoprotein lipase
SPSS	Statistical Package for Social studies.
T-CHO	Total cholesterol
TG	Triglyceride
VLDL	Very Low Density Lipoprotein Cholesterol

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