
International Journal of Advanced Research in Biological Sciences

ISSN: 2348-8069

www.ijarbs.com

Research Article



A data of Lipid profile in diabetic hypertension and non hypertension Patients in Pondicherry.

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Abstract

In people with diabetes however, heart disease often doesn't offer such clues, so those people may not seek medical care until noticeable and more serious-complication have occurred. In other works they can have a "silent" heart attack and not know it. The risk of heart disease increases more if the diabetes is poorly managed. Poorly managed diabetes can result in abnormal cholesterol levels and increased blood glucose levels. In the present study an attempt is made to examine the changes in the lipid profile in the diabetes patients with and without hypertension and thereby to create awareness on the importance of closely watching their lipid parameters frequently from the age of 30. people with these signs and symptoms know something's wrong and are likely to seek help,(1) [Baliarshinha, Das, 2002].

Keywords: Lipid profile, diabetes , blood glucose, create awareness.

Introduction

Cholesterol and PL constitute about two thirds of the total plasma lipids whereas free fatty acids (FFA) are metabolically most active. Distribution and levels of different lipids in the plasma rare dependent upon the state of lipid traffic and factors modifying the production, passage, clearance and utilization of the lipoprotein molecules. These molecules have been classified into four major classes depending upon their specific gravity, edectrophoretic mobility, type of lipid and phospholipids constitution, source of origin and apoprotein content. At any point of time, the plasma is flooded with a variety of lipoprotein molecules out of which the major lipoproteins are low density lipoprotein (LDL) and high density lipoprotein (SDL). While HDL is smallest in size and most dense in constitution, the chylomicron is the largest and can be detected under a light microscope. Amidst the four major classes of lipoprotein chylomicron and very low

density lipoprotein (VLDL) have high triglyceride content. Cholesterol constitutes 50% of the weight of LDL and HDL carries up to 20% of cholesterol but is rich in phospholipids and Apoproteins,(1.a) Baliarshinha, DAS, 2002].

Materials and Methods

The aim of the present study is to analyze lipid abnormalities in diabetes mellitus and in non diabetes mellitus with and without hypertension in relation to age and sex. Collection of secondary data from the record of Aravind clinical lab, Puducherry. To find out the lipid profile abnormalities in diabetic patients. To ascertain the changes in the lipid profile on various age group of diabetic and non diabetic patients. To compare the lipid profile among patient having both diabetes and hypertension. This method describes

how and under what conditions the empirical data underlying this publication have been produced. Empirical data were gathered procedurally over a period of two year.

Data sources and searches

We searched in the following electronic databases: MEDLINE (1952 to 2007), EMBASE (1980 to 2007), (1982 to 2007), and Web of sciences (-2007).

Study selection

Our protocol was implemented with reference to the QUOROM guidelines (2) (Moher et. al., 1999). Studies qualified for inclusion were randomized trials because this study design generally supports high validity in testing the effectiveness of health technologies (4)(Richter and Berger, 2000). All

studies included tested the effect of self-care behavior interventions and involved adult patients diagnosed with type 2 diabetes/non-insulin-dependent diabetes.

Data collection

Data were collected during focus group interviews between June 2012 and May2015. The interactive and synergistic nature of focus group interviews allowed us to explore patient’s experiences with diabetes in a spontaneous and emotional way. Focus group interviews allowed access to a wide variety of ideas, views and experiences on self-management among patients with diabetes and insight into how a consensus was reached (or not) on issues relating to everyday life with diabetes,(3) (Lisbeth Kirstine Rosenbek Minet, 2010).

Table: 1 Lipid profile in diabetic without hypertension female (30-70years)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic without Hypertension	170	168	116	50	95	23	3.36

Table: 2 Lipid profile in non diabetic with hypertension male (30-70years)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Non Diabetic with Hypertension	96	158	98	58	85	15	2.70

Table: 3 Lipid profile in diabetic and non diabetic female (30-40)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	192	211	105	163	127	21	3.34
Non Diabetic	98	215	100	77	118	20	2.79

Table: 4 Lipid profile in diabetic and non diabetic male (30-40)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	163	155	148	46	80	29	3.36
Non Diabetic	89	176	107	44	111	21	4.0

Table: 5 Lipid profile in diabetic and non diabetic female (40-50)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	153	142	147	52	61	29	2.73
Non Diabetic	82	169	78	50	104	15	3.38

Table: 6 Lipid profile in diabetic and non diabetic male (40-50)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	160	185	173	51	100	34	3.62
Non Diabetic	60	170	146	51	90	29	3.30

Table: 7 Lipid profile in diabetic and non diabetic female (50-60)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	167	215	253	48	117	50	4.47
Non Diabetic	87	200	133	57	117	26	3.50

Table: 8 Lipid profile in diabetic and non diabetic male (50-60)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	140	165	148	40	96	29	4.12
Non Diabetic	60	160	168	36	91	33	4.40

Table: 9 Lipid profile in diabetic and non diabetic male (60-70)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	135	138	208	44	53	41	3.13
Non Diabetic	89	178	140	45	105	28	3.95

Table: 9 Lipid profile in diabetic and non diabetic female (60-70)

	FBS	Cholesterol	Triglycerides	HDL	LDL	VLDL	Chol/HDL Ratio
Diabetic	132	226	185	51	89	45	3.60
Non Diabetic	113	162	156	52	79	31	3.11

Normal value Cholesterol

Fasting blood sugar (FBS)	70-110mg/dl
Cholesterol	200-239mg/dl
Triglycerides	>160mg/dl
High density lipoprotein(HDL)	130-159mg/dl
Low density lipoprotein(LDL)	35-60mg/dl
Very low density lipoprotein(VLDL)	10-30mg/dl
CHOL/HDL Ratio	2-6

(6)Harrison's 14th Edition**Discussion**

Disorders of the lipoprotein metabolism in diabetic patients are of great interest because their association to the presence of atheromatosis and because cardiovascular diseases are the major cause of mortality in diabetic patients. People with diabetes are 2 or 4 times likely to get heart disease than people who don't have diabetes. The relationship between heart disease and diabetes is so serious that 4/5 people with diabetes will die of heart disease (5) [Kannel, McGee, 1979].

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