Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 9, Issue, 11, pp.60533-60537, November, 2017

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

ISSN: 0975-833X

RESEARCH ARTICLE

EFFICACY OF HOMOEOPATHIC MEDICINES IN THE TREATMENT OF HYPERLIPOPROTEINEMIA

***[1]Dr. Abdurahiman, T. and [2]Dr. Fathimathu Zuhara**

[1]Former Principal and Controlling Officer, Department of Homoeopathic Medical Education, Govt of Kerala
[2]Professor (Retd), Dept of Life sciences, University of Calicut, Kerala, India, 673635

ARTICLE INFO

Article History:
Received 28th August, 2017
Received in revised form
11th September, 2017
Accepted 21st October, 2017
Published online 30th November, 2017

Key words:
Hyperlipoproteinemia, Hyperlipidemia,
Hypertriglyceridemia,
Coronary artery Disease,
Diabetes mellitus, Hypertension,
Life style diseases.

ABSTRACT

Disorders of lipid metabolism results in *Hyperlipoproteinemia which* is one of the modifiable factor and leading cause of Coronary Artery Diseases.Clinical trials of relatively short term duration indicate that 2% reduction in CAD rates from each 1% reduction in serum cholesterol. Though Homoepathic treatment is found to be effective in various clinical conditions reelated to CAD, no biochemical correlation were attempted. This prospective study included primary hyperlipoproteinemia, diabetes mellitus, Hypertension and coronary artery disease groups. A total number of 86 patients were followed for about 2 years. Analysis of this study indicated a highly significant reduction in total cholesterol (< 0.001), LDL cholesterol (< 0.001), and non –HDL cholesterol (0.001). C:HDL and LDL: HDL were also reduced after treatment. There was reduction from high risk group to low risk group and optimal levels. This study had also demonstrated the efficacy in reduction of risk for develoment of CAD in 10 years, reduction of fasting and post prandial blood sugar in diabetes mellitus, as well as systolic and diastolic pressure in Hypertension. This study indicates efficacy of Homoeopathic method of treament in Life style disorders - Hyperlipidemia, Hypertension, Diabetes Mellitus, Coronary Artery diseases as well as the prevention of development of CAD.

Citation: Dr. Abdurahiman, T. and Dr. Fathimathu Zuhara, 2017. "Efficacy of homoeopathic medicines in the treatment of hyperlipoproteinemia", *International Journal of Current Research*, 9, (11), 60533-60537.

INTRODUCTION

Disorders of lipid metabolism results in *Hyperlipoproteinemia* - which may be primary or secondary. Hyperlipidemia is one of the modifiable factor of Coronary Artery Diseases (CAD). It has been clinically verified that many Homoeopathic drugs are effective in various clinical conditions including metabolic disorders. Biochemical values are found to be modified under Homoeopathic method of treatment. Various metabolic disorders including Diabetes, Gout, psychosomatic disorders including Hypertension, endocrine disorders including thyroid disorders, angina pectoris, and other systemic disorders are found to be responding well to the Homoeopathic treatment. The names of the drugs and their employment in above clinical conditions are already available in Homoeopathic literature. But no reference was yet known to be given to the biochemical changes effected by the action of drugs in relation to cholesterol metabolism disorders. Homoeopathic method of treatment is emerging as an alternative system of medicine, having wide acceptance and Government patronage in various state in India, especially in Kerala.

Corresponding author: **Dr. Abdurahiman, T.,**
Former Principal and Controlling Officer, Department of Homoeopathic Medical Education, Govt of Kerala.

Review of Literature

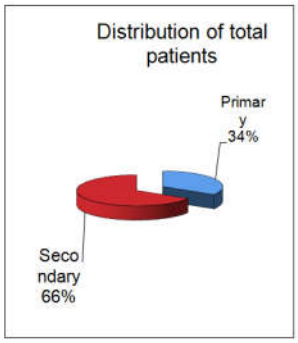
Hyperlipoproteinemia may appear as Hypercholesterolemia, Hypertriglyceridemia or Combined hyperlipidemia. National Cholesterol Education Program (NCEP) suggests two major strategy - clinical (patient based) and population (public health) approach for preventing coronary artery disease. Clinical trials of relatively short term duration indicate that 2% reduction in CAD rates from each 1% reduction in serum cholesterol. The reduction achievable with long term cholesterol lowering may be, perhaps, 3% for each 1% reduction in cholesterol. The demonstration that cholesterol lowering prevents CAD is the cornerstone of both the public health and clinical approach to the controlling of high blood cholesterol (National institute of health, 1993). In the projected leading causes of morbidity and mortality in 2020 Car J Pepine reports that ischemic heart disease will rank first world wide - being first in developed countries and third in developing countries (Carl, 2001). Studies have shown that CAD prevalence in Indian urban population increased from 3.5% in 1960^s to 9.5% in 1990^s. In rural areas it increased from 2% in 1970^s to 4% at present. Several studies have clearly shown that CAD is a significant problem in India (Rajeev Gupta, 2001). Cardiovascular disease in 1998 accounted for 30.2% of all cause mortality in India compared to 25.5% in 1990. CAD

mortality in India accounted for 16.9% CAD death worldwide. CAD prevalence shows that the problem is increasing in India, more in urban than in rural areas. Gopinath *et al.,* reported a mean cholesterol in normal subjects of 199mg/d L and 169 mg/d L in urban and rural subjects. Rajeev Gupta reports a mean of 191 ± 53 mg/d L in a cohort of 210 adult men of higher class in Jaipur. The increase in total cholesterol levels in urban India is in contrast to the falling mean population cholesterol in USA (Rajeev Gupta, 2001). Aleyamma Joseph *et al* reports the alarming situation of mean levels of lipids in a community study of an urban settlement in Thiruvananthapuram (Aleyamma Joseph, 2000). The increasing incidence of CAD in India is due to combination of genetic predisposition (elevated levels of Lp (a)) and environmental factors or life style changes. The mean cholesterol level in kerala (219 mg/d L) is substantially higher than the rest of India-(New Delhi -190 mg/d L). Kerala has almost double the rate of adults with high cholesterol (more than 240mg/d L) compared to US (Kerala 32% and US 18%). The HDL cholesterol level in Indians is 5-10 mg /d L lower than US (Enas, 2001). Executive summary of ATP III defines the reduction of LDL cholesterol as primary goal of therapy. ATP III also identifies the Non - HDL cholesterol as a secondary target of therapy in persons with triglyceride levels of 200 mg/dL (National institute of Health, 2001). Homoeopathic drugs capable of producing secondary Hyperlipoproteinemia like Glycosuria, hypertension, thyroid enlargement (Goiter), inflammation of kidney, albuminuria, casts in urine, Gout, jaundice, obesity and other clinical conditions that have been produced as a complication of hyperlipoproteinemia like peripheral vascular disease (Gangrene), claudication, angina pectoris, and cerebrovascular accidents (apoplexy) (Robin Murphy, 1993). But no biochemical correlations of them are yet mentioned. It is to be particularly noted that the drugs for cholesterol metabolism disorders were not yet been known to be mentioned in the Homoeopathic literature. At the same time, many of the patients with above clinical conditions were found to be responding well to the Homoeopathic method of treatment. On this background this study was conducted.

MATERIALS AND METHODS

This study was conducted in patients attending Unit 1 of the Organon and Homeopathic philosophy department at Government Homoeopathic Medical College, Calicut, Kerala, India. The study started from 27.9.01 and results obtained up to 16.10.2003 were taken for statistical analysis. Patients with obesity, Xanthoma, hypertension, liver diseases, Diabetes mellitus and those presented with known history of hyperlipidemia and coronary artery diseases were screened for the selection. A total number of 148 patients were screened for lipid profile and 86 patients continued for different duration for the treatment. The cases were taken and analyzed according to Homoeopathic philosophy. The Lipid profile was estimated after 12 hours fasting and other necessary investigations were also conducted. Total cholesterol, triglycerides and high-density lipoproteins were estimated by enzymatic method. Very low-density lipoprotein and low-density lipoprotein were calculated from the above values. The results were correlated with clinical history and medicine with suitable potency was selected. The selected potencies were either of 30, 200, 1m, 10m, 50m, or cm potencies. One medicated globule of number 30 size is divided into two doses after mixing with sugar of milk and is administered orally at 12 hours interval.

On an average 30th potency was repeated at fifth or seventh day, 200th potency was repeated biweekly, 1m potency was repeated at monthly interval, 10m potency was repeated at three or four months interval, 50m potency was repeated at six monthly interval and cm potency was repeated at yearly interval depending on the improvement. The cases were evaluated monthly according to the clinical features and value of lipid profile. The same medicine was repeated in the order of increasing potency. In cases where vide fluctuations in lipid profiles were resulted, a new medicine under the follow up group of first prescription or an anti-miasmatic medicine was administered. Total cholesterol, HDL cholesterol and Triglycerides are estimated by enzymatic method. Reagents from Autospan, Reckon diagnostics private limited and Merck Labkit were used for the estimation of Cholesterol, HDL and Triglyceride and readings were made by photoelectric calorimeter from Erma Inc, using filter with wavelength 530nm. Those patients under allopathic medicine for hyperlipidemia were advised to continue the drugs and to gradually stop them. Some of the patients under allopathic medicines reported after stopping them. In such patients the lipid profile value after one month of stopping the medicine are taken for tabulation. The percentage of developing cardio vascular risk in 10 years in patients of primary and hypertensive groups are calculated using online LDL cholesterol goal calculator, provided by Medical college of Wisconsin, General Internal Medicine 9200 W. Wisconsin Ave. Milwaukee, WI. 53226. Statistical analysis was done using SPSS (statistical package for social science) for MS windows release 6.0. Eighty-six patients (58% of the total screened patients) continued under treatment. Of these, 29 patients had primary Hyperlipoproteinemia, 22 patients were diabetic, 20 were hypertensive, 14 had coronary artery disease and one patient suffered from hepatitis. The distribution of patients, lipid profile and medicines given to the patients are given below:



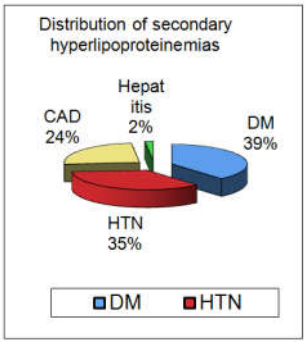


Fig. 1. Distribution of Total Patients Fig. 2. Distribution of Secondary group

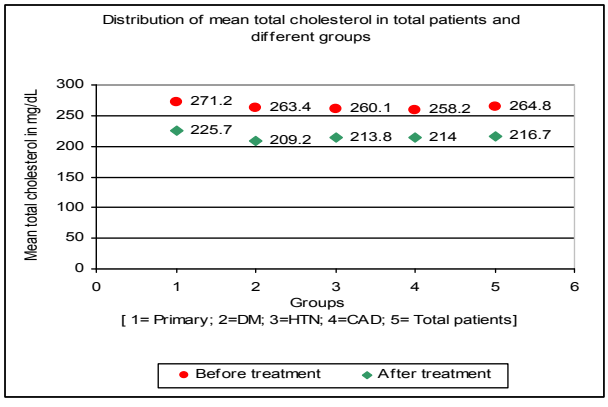


Fig. 3. Distribution of Mean Total Cholesterol in different groups

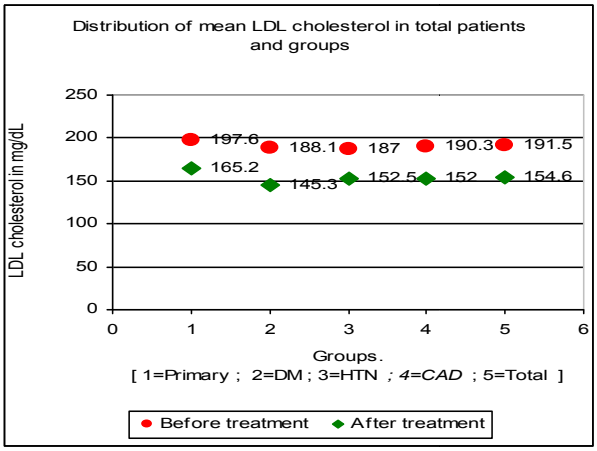


Fig. 4. Distribution of Mean LDL Cholesterol in different groups

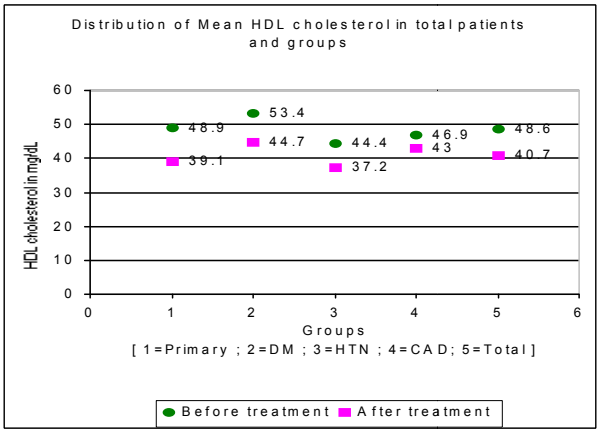


Fig. 5. Distribution of Mean HDL Cholesterol in different groups

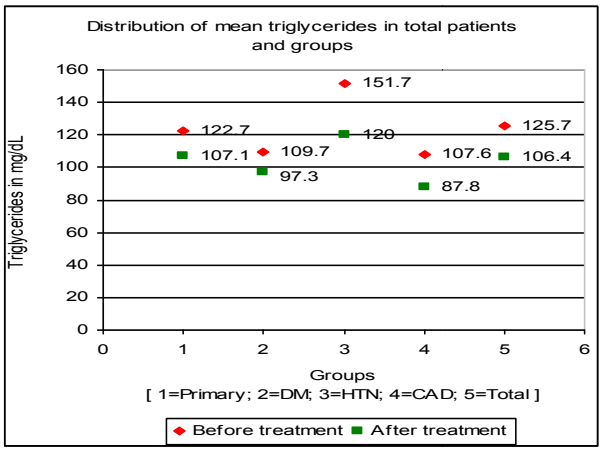


Fig. 6. Distribution of Mean Triglycerides in different groups

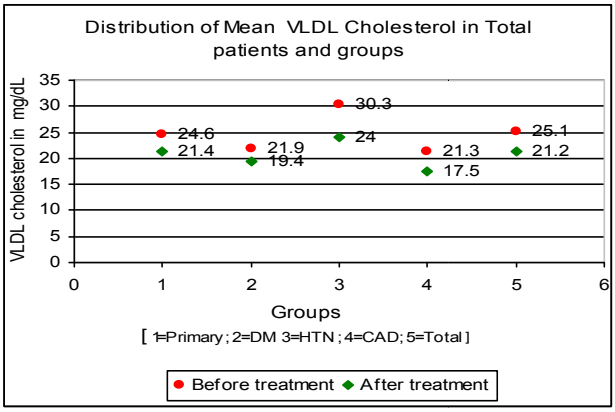


Fig. 7. Distribution of Mean VLDL Cholesterol in different groups

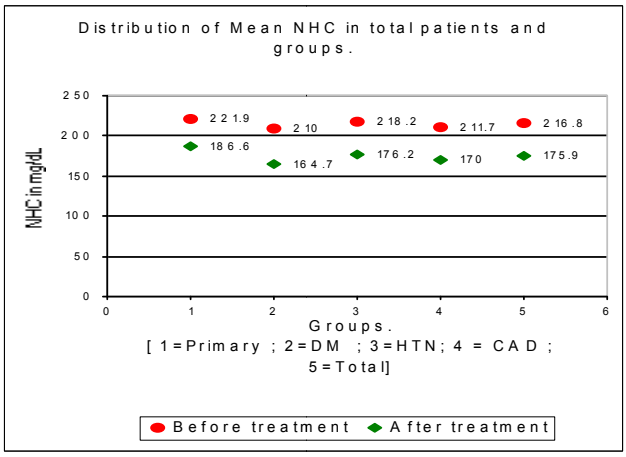


Fig. 8. Distribution of Mean NHC in different groups

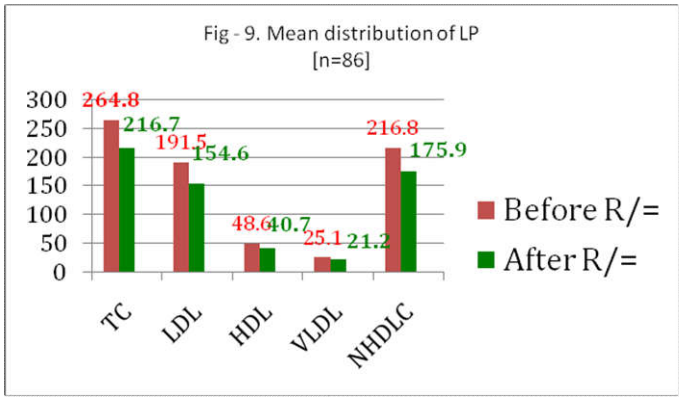


Fig. 9. Mean distribution of Lipoproteins before and after treatment

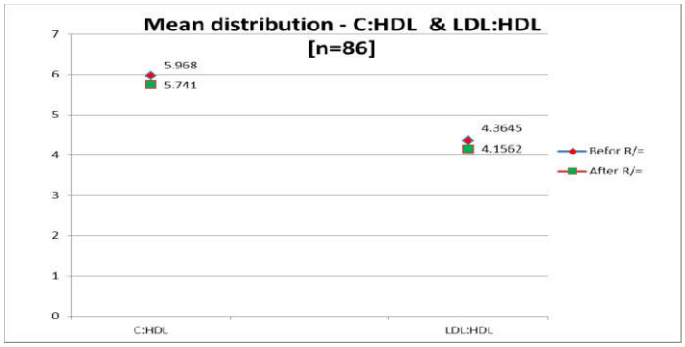


Fig. 10. Mean distribution of C:HDL and LDL:HDL before and after treatment

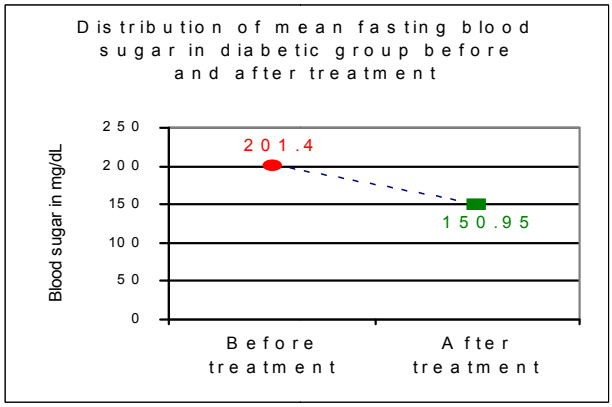


Fig. 11. Mean distribution of FBS

Table 1. Test values for assessing significance of reduction in total cholesterol, LDL cholesterol, HDL Cholesterol, Triglycerides, VLDL Cholesterol and Non- HDL Cholesterol

Variable	Sample size	Description	Mean	S.D	Difference in means	S.D	S.E.of mean	t-value	p-value
TOTAL	86	Before treatment	264.89	2.24	48.13	45.69	4.92	9.77	< 0.001
CHOLESTEROL		After treatment	216.76	33.4					
LDL C		Before treatment	191.56	50.40					
	86	After treatment	154.63	33.93	36.93	45.77	4..93	7.48	<0.001
		Before treatment	48.62	15.31					
HDL C	86	After treatment	40.70	11.22	7.92	13.57	1.46	5.41	<0.001
		Before treatment	125.79	57.03	19.35	46.19	4.98	3.89	<0.001
TG	86	After treatment	106.43	54.801					
		Before treatment	25.17	11.37					
VLDL C	86	After treatment	21.28	10.97	3.88	9.23	0.99	3.90	<0.001
		Before treatment	216.81	50.88					
NHDL C	86	After treatment	175.98	34.59	40.83	45.24	4.87	8.37	<0.001

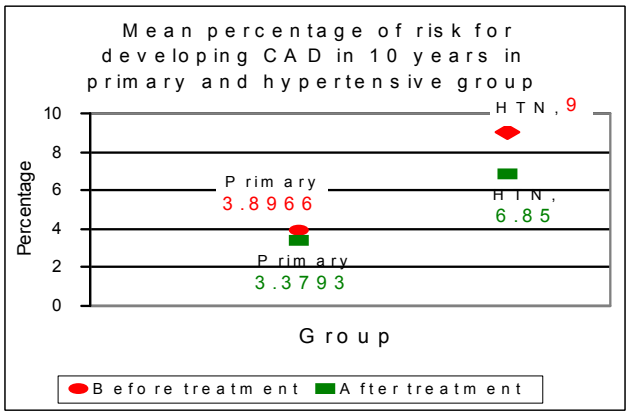


Fig. 12. Mean % of risk for CAD

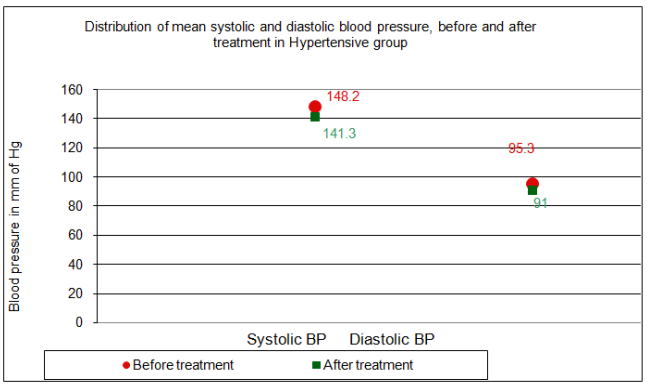


Fig. 13. Mean distribution of Systolic & Diastolic blood pressure

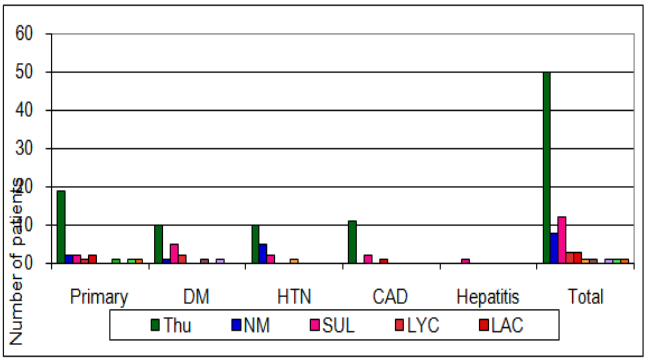


Fig. 14. Comparative study of drugs found to be effective in different groups

[Thu- Thuja; NM- Natrum mur; Sul-Sulphur; LYC-Lycopodium; LAC-Lachesis; MED-Medorrhinum; STA-Staphysagaria; IOD-Iodum, SPO-Spongia; LUE – Luesinum.]

DISCUSSION AND CONCLUSION

The total population of this study have shown an increased level of total cholesterol (Fig. 3), LDL cholesterol (Fig. 4) and non – HDL cholesterol (Fig. 8) before treatment. After treatment the statistical analysis indicates a highly significant reduction in total cholesterol (< 0.001) (Table 1), LDL cholesterol (< 0.001) (Table 1), and non –HDL cholesterol (0.001) (Table 1). There was reduction from high risk group to low risk group and optimal levels. The results of this study had also demonstrated the efficacy in reduction of fasting blood sugar in diabetes mellitus (Fig. 11), reduction of risk for develoment of CAD in 10 years (Fig. 12), as well as reduction in systolic and diastolic pressure in Hypertension (Fig.13). This study indicates that Homoeopathic drugs *Thuja occidentalis, Natrum muriaticum, Sulphur, Lycopodium clavatum, Lachesis mutus, Medorrhinum, Staphysagaria, Iodum, Spongia tosta, Luesinum* are effective (Fig. 14) in the management hyperlipoproteinemia. Statistical analysis of this study with homoeopathic drugs achieves the aim similar to that have been prescribed in ATP II and III. This study indicates that homoeopathic drugs are effective in reducing total cholesterol and LDL cholesterol and suggest that it can be used effectively for the primary and secondary prevention of coronary artery disease and in effective managemant of life styles diseases – Diabetes Mellitus, Hypertension and Hyperlipidemia.

Conflict of interest

The authors does not have any conflict of interest.

Financial support

This study was conducted without any financial support from Government, any individual or any organisations.

Acknowledgement

We thankfully acknowledge the support given by the authorities of University of Calicut, staff and students of Dept of Life sciences, University of Calicut, Kerala, Principal, Hospital Superintendant, technicians and staff of Clinical laboratory, Govt Homoeopathic Medical College, Calicut, Kerala, India.

REFERENCES

Aleyamma Joseph, Ramankutty. V., Soman, C.R. 2000. High risk for coronary heart disease in Thiruvananthapuram city:

A study of serum lipids and other risk factors; *Indian heart Journal*; 52; Pp.29-35

Carl, J. Pepine; 2001. Why vascular biology matters; *The American journal of Cardiology*; Vol. 88 (8A); October 5k – 8k.

Enas, A. Enas, Senthilkumar, A., 2001. Conquering the epidemic of coronary artery disease among Indians: Crucial role of Cardiologists; *Cardiology today*; vol V; No 5; September- October, Pp.282-293

National institute of Health, National Heart, lung and Blood institute; Second report of the expert panel on detection, evaluation and treatment of high cholesterol in adults(Adult Treatment Panel III) -Executive summary: *NIH publication* No: 01- 3670; May 2001.

National institute of health; Chapter 1: Classification, prevalence, detection, evaluation; *ATP II- Executive summary; National cholesterol education program*; 1993; Pp.1-17

Rajeev Gupta, Peeyush Jain, Upendra Kaul *et al.,* ; Prevention of coronary heart disease in India; Cardilogical society of India guidelines; *South Asian journal of preventive cardiology*; Vol.5; July – December 2001; Pp.45 – 60.

Rajeev Gupta; Coronary Heart disease epidemiology in India: Lessons learnt and future directions; *Cardiology today*; Vol V; No: 4 July –August 2001; Pp.225-231.

Robin Murphy; *Homoeopathic Medical Repertory*, Indian books and periodicals; 1993; 160,163,553,562,938, 1499, 1508.

****