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Research Article

EFFECT OF *ABHYANTARA SNEHAPANA* AND *VAMANA KARMA* IN PATIENTS WITH NORMAL AND ABNORMAL TO LIPID PROFILE

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ABSTRACT

In the recent years, India and other developing countries are witnessing a rapid escalation in lifestyle disorders like diabetes, coronary artery disease, obesity, hypothyroidism, etc. The prime causative factor for all the lifestyle disorders is hyperlipidemia or dyslipidemia. Dyslipidemia is defined as a metabolic disorder that occurs due to abnormal blood lipid levels. This may lead to increase in the chances of atherosclerosis, heart attacks, stroke and other circulatory disorders. The abnormal lipid levels may include increase in triglycerides, VLDL, LDL and decrease in HDL. *Vamana karma*, a bio-purificatory emesis, being the major *Panchakarma* therapy has its greatest influence on almost all the lifestyle disorders. Lifestyle disorders aren't possible without the involvement of *Kapha dosha* and *Medho dhatu. Vamana* is the first line of choice in the treatment of disorders caused by the aggravation of *Kapha Dosha* or *Kapha* associated with *Pitta dosha*. *Vamana karma* involves a pre-procedure called *Snehapana*, which include administration of high quantity of medicated lipids for a maximum period of seven days, followed by the bio-purificatory emesis or *Vamana karma*, a process of elimination of morbid *Doshas* from the oral route. Considering the high amounts of lipid usage in *Snehapana*, it becomes essential, to monitor its impact on lipid profile in patients undergoing *Vamana karma* for various etiologies. The present clinical study is of paramount importance as there were no previous studies on the impact of *Sneha pana* and *Vamana* in patients with both normal and abnormal lipid profiles. The statistical significance of results were quantitated by paired t test. Although *Snehapana* followed by *Vamana,* did not significantly alter levels of total cholesterol, and LDL, it did cause a significant reduction in triglycerides (p=0.0013) and VLDL (p=0.0038), improvement of HDL (P=0.02) in all the patients with abnormal lipid profile. However the values remained within the limit in patients with normal lipid parameters.

INTRODUCTION

Vamana is a unique procedure of eliminating the *Doshas* from the body through the oral route by inducing vomiting. *Kapha dosha*, the third among the three *Doshas* is best eliminated by this procedure. Acharya Sushruta asserts the importance of *Vamana* as; just like the flowers, fruits and branches of the tree are destroyed as soon as the mother tree is rooted out, the diseases originated due to excessive *Kapha* are also subdued after the elimination of *Kapha*, through the process of *Vamana*.[1] *Vamana* is indicated in *Bahudoshavastha* e.g. *Kusta* (skin disorders), *Prameha* (diabetes) etc in *Kapha* dominant conditions like *Sthoulya, Swasa, Kasa, Slipada* etc conditions.[2] Dyslipidemia is a form of *Kaphavikara* specifically *Medodushti* in the form of *Abaddha meda*.[3] Disorders of lipoprotein metabolism are collectively referred to as dyslipidemias.[4] Dyslipidemias are generally characterized clinically by increased plasma levels of cholesterol and triglycerides or both, variably accompanied by reduced levels of high-density lipoprotein (HDL) cholesterol.[3] As per Ayurveda classics *Samshodhana* therapy is very effective in

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treating any disease, as it eliminates *Dosha* from the body.

To carry out *Vamana karma* a preliminary step needs to be followed which is called as *Abhyantara snehapana*. *Abhyantara Snehana* has got a great role in all *Panchakarma* procedures. It helps in *Dosha utklesha*, facilitating the mobility of *Doshas* from the *Sakhas* to *Kostha*. The *Snehana* which is given in *Utthama matra* (high doses) prior to *Shodhana*, is known as *Shodhanartha snehapana*. This *Sneha dravya* is given in a particular increasing pattern, for a duration of three to seven days according to *Kosta* and *Agni*. An increasing dose of oral lipids is raising a fear in the medical fraternity and the patients that it will increase the cholesterol level leading to cardiac ailments. So in order to remove this misconception, an attempt is made to critically review in the light of classical references and modern research findings. Although many studies have been performed in the past to prove the efficacy of *Shodanartha Snehapana* and *Vamana karma* in dyslipemia, the present study stands unique by comparing the effect of *Snehapana* and *Vamana karma* in patients with both normal and abnormal lipid profiles.

Effect of *Shodhanartha snehapana* on lipid profile were measured before *Snehapana* and after *Vamana.*

Table 1: Myths and facts about *Sneha pana*

Myths	Facts
Snehapana increases body weight	*Sodhana purva Sneha* is done a maximum of 7 days and hence doesn't increase body weight
Snehapana is to be avoided in diabetic patients	In patients with mild to moderate levels of high blood glucose levels also *Snehapana* can be administered
Snehapana is not good for patients with high cholesterol	*Snehapana* followed by *Vamana* is reduces high cholesterol levels
Snehapana impairs digestion	*Snehapana* improves digestion

AIM OF STUDY

To evaluate the Effect of *Snehapana* and *Vamana karma* in patients having normal and abnormal lipid profiles.

MATERIALS AND METHODS

As per the inclusion criteria for *Vamana karma*, a total of 30 patients with both normal and abnormal lipid profiles were selected from the O.P.D of *Panchakarma* department.

Type of Study

It was an open observational clinical study with a two separate groups one with normal profiles and another with abnormal profiles.

Inclusion Criteria

Patients who are fit for *Snehapana & Vamana karma* as per classics.

- Patients between the age group of 20 to 60 years
- Patients with postprandial blood glucose of <250mg/dl or HbA1c of <9%,
- Patients with blood pressure of below 160/90 mmHg
- Triglycerides> 500 mg/dl
- Patients having both normal & abnormal lipid profile values.

Exclusion Criteria

- Patients who are contraindicated for *Snehapana & Vamana karma* as per the classics.
- Age below 20 years and above 60 years
- Patients with postprandial blood glucose of ≥250mg/dl or HbA1c ≥9%
- Patients with blood pressure of above 160/90 mmHg
- Triglycerides ≥ 500mg/dl
- Pregnant and lactating females

Table 2: Therapy Protocol

Therapy Protocol	
Total no. of subjects	30
Snehapana administered for	3-7 days
Vamana	Single session
Samsarjana karma	3-7 days

Methodology

- ***Purva karma***

  Deepana – Pachana with drugs like *Chitrakadi vati, Hinguvastaka churna* twice daily till the state of *Nirama avastha*. Then patients were given *Snehapana* with *Go-ghrita* in *Arohana krama* starting with *Hrisiyasi matra* of 30ml till *Samyak snigdha lakshana* were observed or a maximum of 7 days.

In *Vishrama kala bahya snehana* and *Swedana* are done.

- ***Pradhana karma***

  On the day of *Vamana*, after *Abhyanga* and *Ushna Jalasnana*, milk is given to the patient as a *Aakantapana* (drinking up to the brim of the neck).
- **Preparation of *Vamana dravya*** - *Madanaphala churna* 8-10gm, *Vacha churna* 4gms, *Saindhava Lavana* 2gms are made into a paste with sufficient quantity of honey, given directly or indirectly by mixing with any liquid media like *Yastimadhu phanta* in a lukewarm state. *Yastimadhu phanta* was given to induce the vomiting till the attainment of *Samyak shuddhi lakshanas*.
- ***Paschat karma***: *Dhumapana*
- ***Samsarjana karma*** as per *Shuddhi*

Laboratory Investigations

The serological factors were obtained for total lipid profile {serum cholesterol, serum triglycerides, HDL, LDL, VLDL}. These investigations are carried out before and after the treatment to assess the efficacy of the procedure.

Criteria for Assessment

The assessment was done based on the changes in the lipid profiles for overall assessment of the therapy.

Table 3: Criteria of Assessment

Total cholesterol	Desirable (low)	<200mg/dL
	Borderline (high)	200-239mg/Dl
	High	240mg/dL or greater
HDL cholesterol	Desirable (high)	> 60 mg/Dl
	Acceptable	40-60 mg/dL
	Low	< 40 mg/dL
LDL cholesterol	Desirable (low)	<100 mg/dL
	Acceptable	100-129 mg/dL
	Borderline (high)	130-159 mg/dL
	High	160-189 mg/dL
	Very high	190 mg/dL or greater
Triglycerides	Desirable (low)	< 150 mg/dL
	Borderline (high)	150-199 mg/dL
	High	200-499 mg/dL
	Very high	500 mg/dL
VLDL cholesterol	Desirable (low)	2-30 mg/dL
	High	> 30 mg/dL

HDL: High-density lipoproteins, LDL: Low-density lipoproteins

Statistical Analysis

Lipid profiles of the patients who have given consent for the study were observed, before *Snehapana* and after *Vamana*. The information collected on the basis of the above criteria were classified into normal and abnormal profiles according to their individual parameters. These were then subjected to statistical analysis using Graph pad, Microsoft excel software. For within the group comparisons paired T test is used and the value of P less than 0.05 is considered to be statistically significant.

RESULTS

- *Snehapana* was administered in 30 patients for a period of 3 to 7 days till *Samyak snigdha lakshanas*. The range of *Snehamatra* is 400 ml–1050 ml.
- After the period of *Snehapana, Vamana karma* was administered to the patients with various diseases conditions indicated for *Vamana karma*. After *Shodhana karma, Sansarjana karma* (special diet regime to regain *Agni*) was advised according to type of *Shuddhi* (type of purification-mild, moderate, etc.).
- The whole data of 30 patients is categorized into normal and abnormal values individually by each parameter. (LDL, VLDL, HDL, total cholesterol, triglycerides)

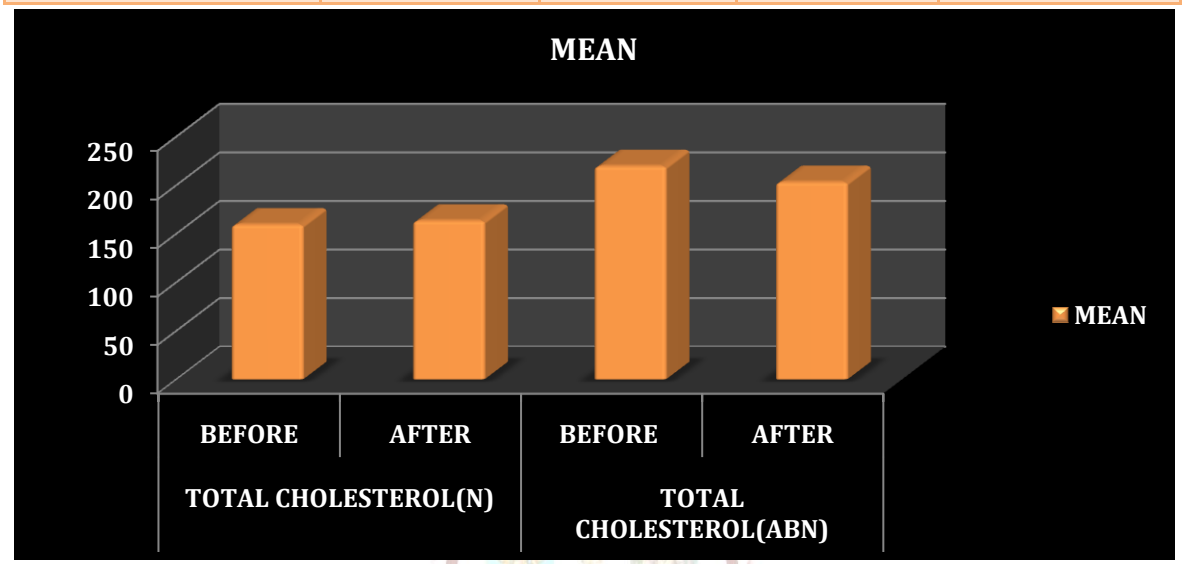
Group 1- Study population with normal lipid parameters before therapy.

Group 2- Study population with abnormal lipid parameters.

- Lipid profile before and after *Snehana* and after *Shodhana* were performed and recorded significant improvement in VLDL, triglycerides and significant raise in HDL (good cholesterol).

Table 4: Normal and Abnormal Cholesterol Values

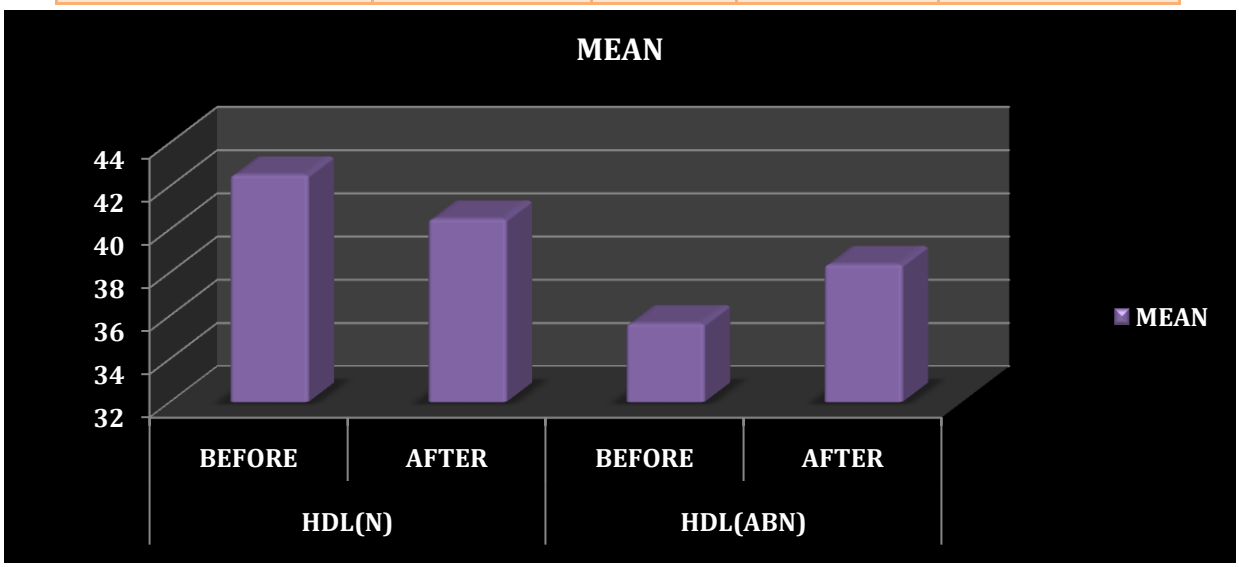
	Total Cholesterol (Group -1) (normal)		Total Cholesterol (Group -2) (abnormal)	
	Before	**After**	**Before**	**After**
Mean	159.42	163.38	219.57	203.14
Standard deviation	24.48	29.66	17.32	32.55
T value	0.7475		1.0658	
P value	0.4627		0.3275	
Number	23		7	



Graph 1: Normal and Abnormal Total Cholesterol

Table 5: Normal and Abnormal HDL Values

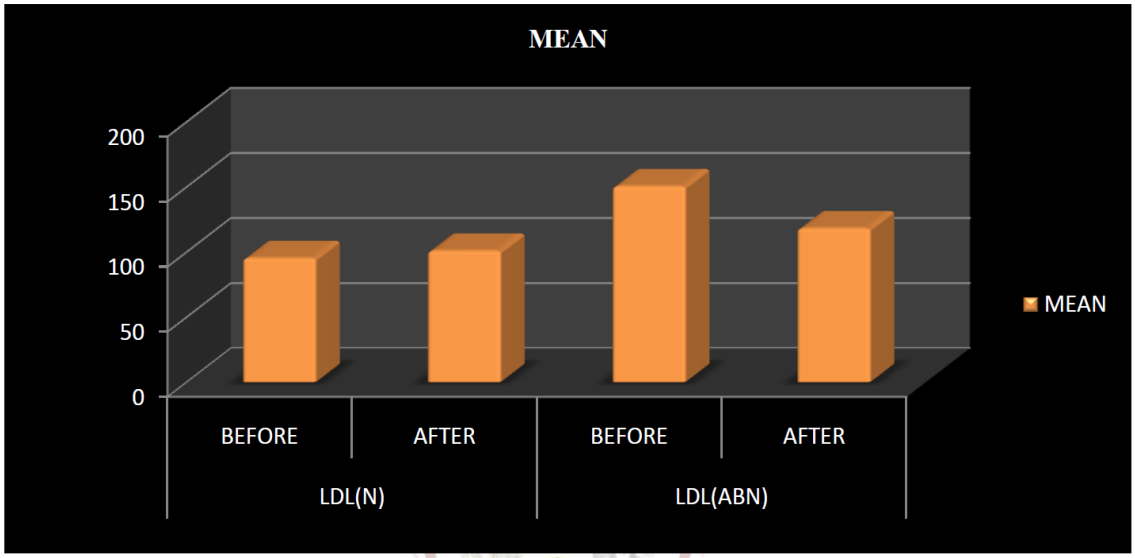
	HDL (Group-1) (Normal)		HDL (Group-2) (Abnormal)	
	Before	**After**	**Before**	**After**
Mean	42.52	40.48	35.64	38.38
Standard deviation	2.73	7.58	3.11	6.27
T value	1.0363		2.5229	
P value	0.3223		**0.0219**	
Number	12		18	



Graph 1: Normal and Abnormal HDL

Table 6: Normal and Abnormal LDL Values

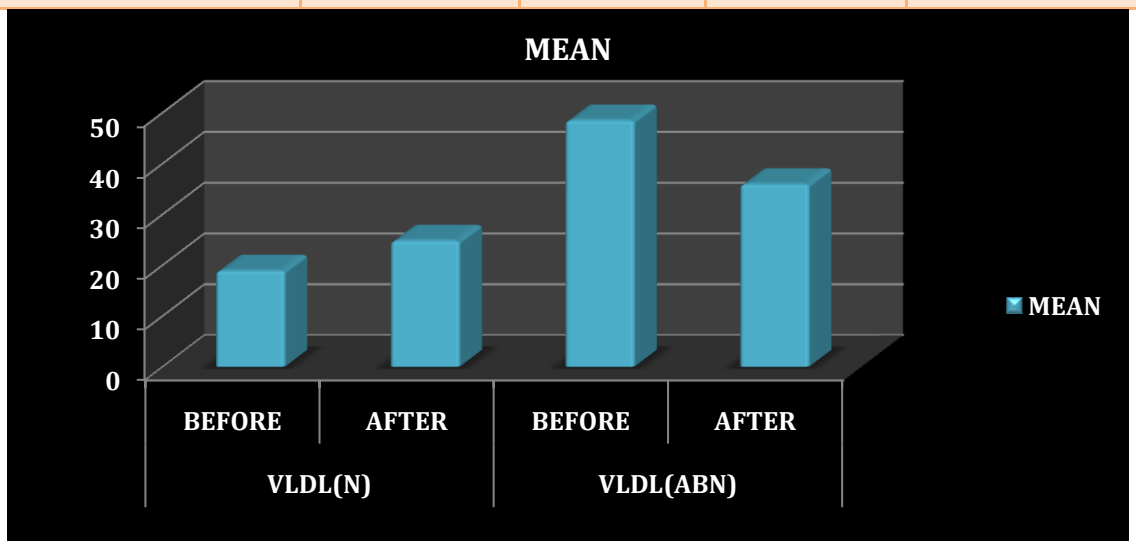
	LDL (Group-1) (Normal)		LDL (Group-2) (Abnormal)	
	Before	**After**	**Before**	**After**
Mean	95.30	100.92	150.5	118.17
Standard deviation	18.73	27.49	14.95	39.16
T value	1.1487		1.8817	
P value	0.2625		0.1186	
Number	24		6	



Graph I: Normal and Abnormal LDL

Table 7: Normal and Abnormal Triglycerides Values

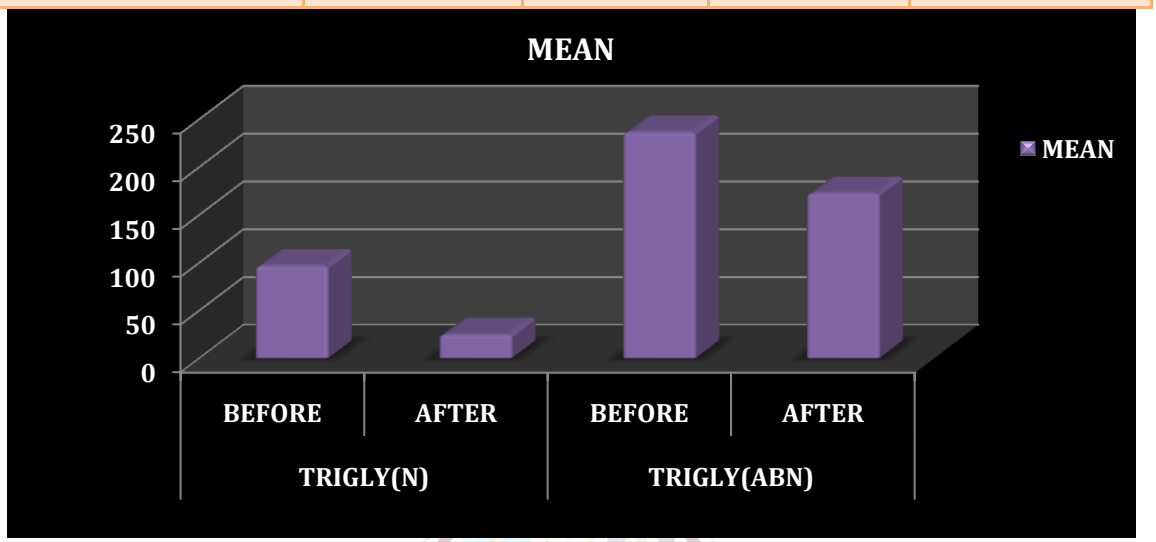
	VLDL (Group-1) (Normal)		VLDL (Group-2) (Abnoral)	
	Before	**After**	**Before**	**After**
Mean	96.47	118.83	236.28	172.36
Standard deviation	24.66	70.92	73.93	85.50
T value	1.4323		4.2613	
P value	0.1702		**0.0013**	
Number	18		12	



Graph 3: Normal and Abnormal VLDL

Table 8: Normal and Abnormal VLDL Values

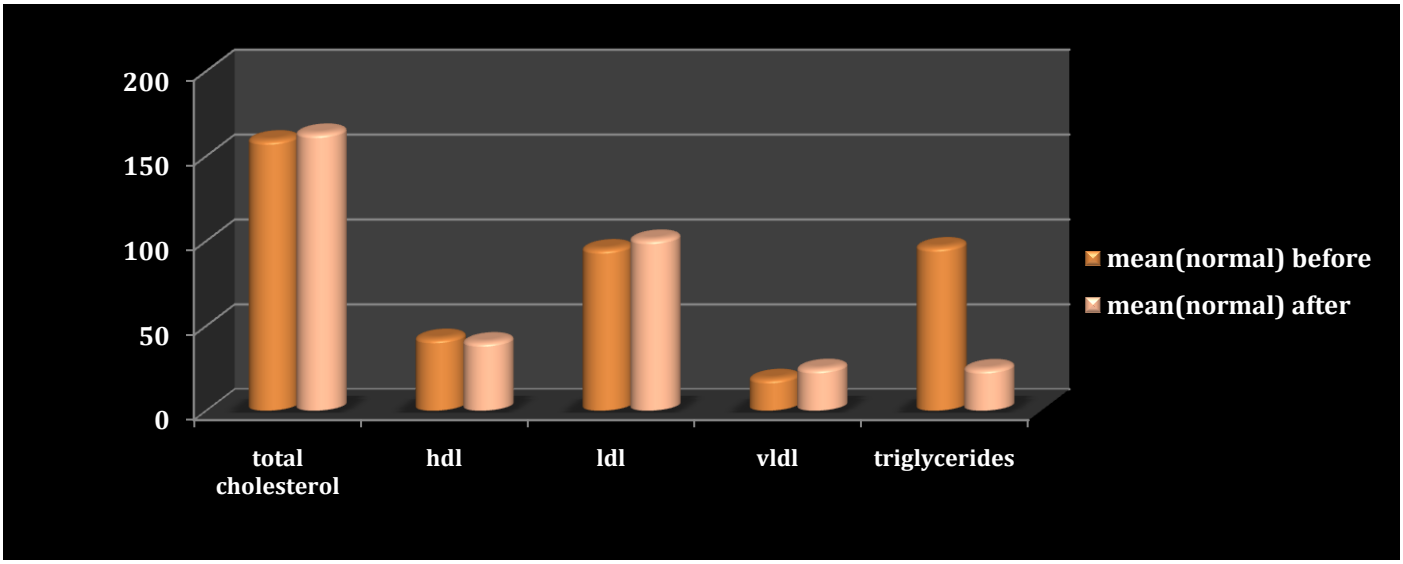
	VLDL (Group-1) (Normal)		VLDL (Group-2) (Abnoral)	
	Before	After	Before	After
Mean	18.91	24.8	48.49	35.93
Standard deviation	4.93	14.63	14.46	17.28
T value	1.8236		3.7444	
P value	0.0849		0.0038	
Number	19		11	



Graph 4: Normal and Abnormal Triglycerides

Table 9: Overall Effect of *Vamana Karma* on Normal Lipid Profiles

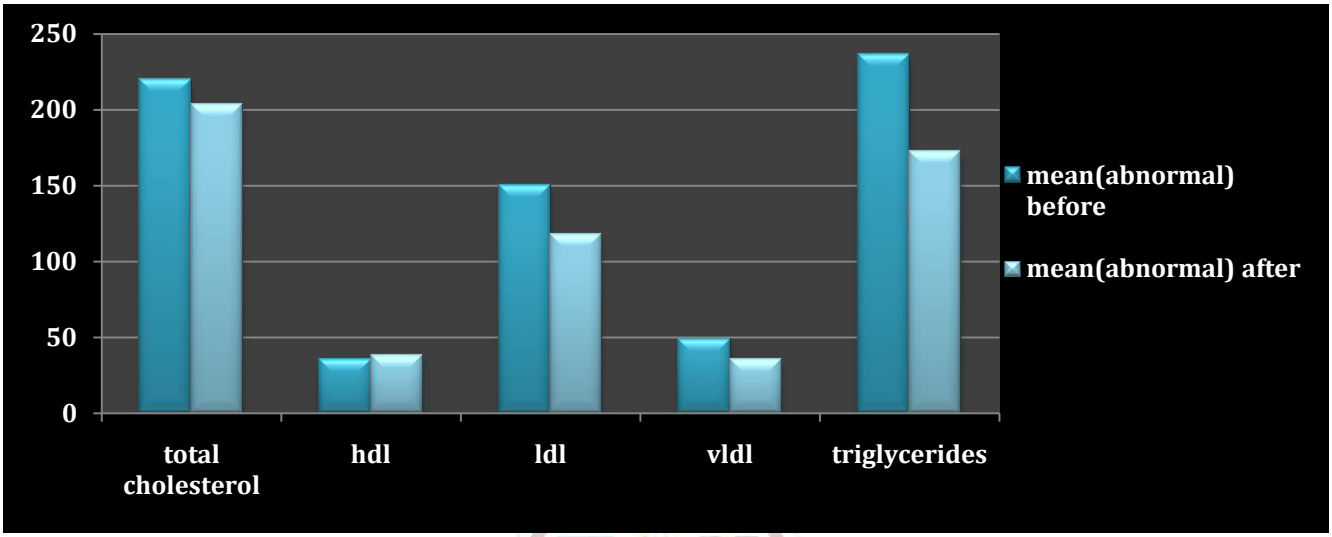
Overall effect	Mean (Normal)	
	Before	After
Total Cholesterol	159.422	163.383
HDL	42.525	40.483
LDL	95.2996	100.9196
VLDL	18.9095	24.8
Triglycerides	96.467	24.661



Graph 5: Overall Means of Normal Lipid Profiles

Table 10: Overall Effect of *Vamana Karma* on Abnormal Lipid Profiles

Overall effect	Mean (abnormal)	
	Before	After
Total Cholesterol	219.57	203.14
HDL	35.6394	38.3761
LDL	150.5	118.17
VLDL	48.4927	35.9327
Triglycerides	236.283	172.358



Graph 6: Overall Means of Abnormal Lipid Profiles

DISCUSSION

There are certain previous comparative studies, *Vamana karma* is proved to be effective in dyslipidemias against a standard anti-lipidemic drug like *Atorvastatin*.[5]

Vamana which is conducted on patients who have both normal and abnormal lipid profiles, there is a mean reduction in total cholesterol levels of patients with abnormal cholesterol levels from a mean of 219.57±17.32 SD before treatment to mean of 203.14±32.55 SD after treatment. In the same study, it is observed that there is a significant raise of HDL {Good cholesterol} in patients having lower HDL levels as compared with patients with normal HDL values, showing both statistical and clinical significance.

Patients with abnormal LDL levels showed more significant improvement. In patients with abnormal levels of VLDL and triglycerides there is a significant reduction of mean values along with significant p values.

Lipid lowering action of *Vamana* occurs mainly through two pathways

- By eliminating the excess circulating lipids *(Kapha dosha)-vamana* eliminates *Kapha dosa* and *Medho dhatu*, having direct effect on adipose tissue and thus decreasing the lipid levels.
- By correcting the lipoprotein metabolism in liver - *Vamana* also has significant action in bringing the *Pitta* to the normal state. *Pitta* is the prime factor for the digestion and metabolism in the body. Moreover, the seat of *Pitta* is *Yakrit* i.e., liver which controls the lipid metabolism. So, by correcting the vitiated *Pitta dosha, Vamana* corrects the whole metabolism of lipid formation and excretion.
- As Acharya Charaka also has clearly mentioned *Vamana* in the treatment of *Santarpana Janya Vyadhi*.[6]
- In a study performed by Sharma et al. in which *Vamana karma* done with *Dhamargava kalpa* followed by *Lekhaneeya ghana vati* as *Shamana aushadhi* has given statistically significant results in lowering lipid levels. In different parameters of lipid profile, the mean reduction of serum cholesterol and serum triglycerides showed better results statistically.[7]
- It has been proved that elevated plasma levels of cholesterol are responsible for atherosclerosis in man, and epidemiological data suggest that elevated plasma levels of HDL have a protective effect.[8]
- *Vamana karma* is highly effective in correcting serum lipid profile except HDL and VLDL but have

better effect than the standard drug in both of them. *Vamana karma* can be used for the effective and safe management of dyslipidemia.- Shipra Singh - has conducted the study clinically. Dr. Alok Kumar Srivastava.[3]

CONCLUSION

Our study found that the use of *Snehapana* and *Vamana* in 30 patient's results, lipid profiles of patients (23) with normal cholesterol is within range even after therapy. At the same time there is a positive impact of *Shodana purva Snehapana* in patients with raised lipid profiles before therapy showed significant reduction in total cholesterol, LDL, VLDL and triglycerides in patients, evident from both mean and t values.

The present study unambiguously re-establishes the significance of *Snehapana* and *Vamana* as a treatment modality for patients with both normal lipids and patients with dyslipidemia. Thus, it can be concluded *Sodhanapurva snehapana* is not only safe but also effective even in patients with dyslipidemia.

REFERENCES

1. Naik, S., & Patil, V. (2022). Scientific review on Vamana dravya (emetic drugs) of Sushruta Samhita. Journal of Ayurveda & Holistic Medicine, 9(6), eissn-2321-1563.
2. R.K Sharma and Bhagwan dash (2013). Caraka Samhitha, chowkhamba Sanskrit series office, Varanasi.
3. Shipra Singh, Alok kumar Srivastava. A clinical study to evaluate the efficacy of Vamana karma in the management of dyslipidemia. Asian Journal of Pharmaceutical and Clinical Research. Vol 11, Issue 12, 2018.
4. Kasper DL, Fauci AS, Hauser SL, Longo DL, Jameson JL, Loscalzo J. Harrison's Manual of Medicine, Endocrinology and Metabolism. 19th ed. Ch. 16. New Delhi: MC Graw Hill Publication; 2008. P. 2438
5. Varma Anupriya A & Varma Ashish J: An Observational Clinical Study On Lipid Profile Changes Before And After Shodhnarth Snehpan. International Ayurvedic Medical Journal {online} 2021 {cited September 2021} Available from: http://www.iamj.in/posts/images/upload/3086_3089.pdf
6. Sastri PT. Vidyotini Hindi Commentary. Revised edition. Sutra Sthana 23/8. Varanasi: Chaukhamba Bharati Academy; 2008. P. 437.
7. Sharma S, Bhatted SK. The effect of Vamana Karma (therapeutic emesis) with Dhamargava Beeja yoga (luffa cylindrica) followed by lekhaneeya Ghana Vati in the management of Dyslipidemia (Medoroga). World J Pharm Res 2016; 5: 1632-42
8. Khairnar A, Shelke S, Rathod V, Kalawane Y, Jagtap A. Review on anti-hyperlipidemic lipophilic drugs and their novel formulation approaches. Int J Pharm Pharm Sci 2017; 9:1-8.

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