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Case Study

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EFFECT OF 'HARIDRADI KWATHA GHANAVATI' IN THE MANAGEMENT OF HYPERLIPIDEMIA IN STHAULYA

Pradnya S. Londhe[1]*, Medha M. Joshi[2], Rupali Khobragade[3], Vrunda Kurande[4], Abhishek Taksale[5] and Japa Phadke[6]

[1]MD Scholar, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

[2]Professor and HOD, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

[3]Professor, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

[4]Associate Professor, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

[5,6]Assistant Professor, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

***Corresponding Author: Dr. Pradnya S. Londhe**

MD Scholar, Dept. of Kayachikitsa, PDEA'S College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

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ABSTRACT

Obesity is one of the most challenging health issues in the present era. It almost felt like an epidemic problem nowadays. Not only developed but also the developing nations affected by this problem. Obesity is the complex, multifactorial type of nutritional metabolic disease. It is a medical condition in which body fat has accumulated to the extent that it has a negative effect on health. It greatly increases risk of chronic diseases like disability, depression, type 2 DM, cardiovascular disease, Hyperlipidemia and many more serious mental problems. Dyslipidemia is a common issue associated with various health problems like cardiovascular diseases, fatty liver, and more. In India, around 25-30% of urban and 15-20% of rural individuals have high cholesterol levels. According to Ayurveda, Dyslipidemia is linked to imbalances in the *Medovaha Strotodushti*. Ayurvedic treatment for this involves *Shodhana* and *Shaman Chikitsa* along with various dry therapies, massage, and dietary adjustments. *Shaman Chikitsa* involves Drug Therapy for maintaining balance of all three Doshas. A 60-year-old woman with weight issues, having complaints like *Shwasadhikya*, *Atikshudha Ati-trushna Aayas-Akshmata*, *Balahinata* and *Nidradhikya* was treated. *Haridradi Kwatha Ghanavati* was used for management in this case resulting in improved symptoms and lipid levels. In summary, *Haridradi Kwatha Ghanavati* appears to be effective for treating Dyslipidemia.

KEYWORDS: *Sthaulya, Haridradi Kwatha Ghanavati, Dyslipidemia, Medovaha Strotodushti.*

INTRODUCTION

The rapid progress in technology, demanding schedules, sedentary lifestyles, and shifts in dietary patterns have rendered individuals more susceptible to various "Lifestyle Disorders," and one of these is Hyperlipidemia. Underlying factors contributing to secondary Hyperlipidemia[1] include conditions like Type 2 Diabetes, Chronic Kidney Disease, abdominal obesity, excessive alcohol consumption, liver issues, and factors leading to Secondary Hypercholesterolemia such as Hypothyroidism, Nephrotic syndrome, pregnancy, Anorexia nervosa, Cholestatic liver disease, Hyperparathyroidism, and certain drugs (diuretics, Corticosteroids). Consuming a diet rich in fats (*Snighdha*, *Guru*, *Pichhila*) and living a sedentary lifestyle (*Cheshtadvesha*, *Asana Sukha*) may contribute to *Medovruddhi*, a condition in Ayurveda characterized by excessive fat accumulation. Ayurveda attributes *Medovruddhi* to *Avyayam* (habits like lack of physical activity) *Achinta* (No worry), *Diwaswap* (daytime sleep), over indulgence in *Madhur Snigdha Ahara*, excessive eating, consuming food in large quantities and *Beeja Swabhav*. This gradually leads to Medovaha Strotodushti[2] eventually leading to conditions like obesity (*Sthaulya*), metabolic disorders (*Prameha*), skin disorders (*Kushtha*), and various issues associated with impaired digestion (*Ama*), reduced vitality (*Napunsakata*), and urinary problems (*Dysuria*).[3] Dyslipidemia, a condition characterized by abnormal levels of lipoproteins in the blood,[4] can be correlated with the concept of *Medovruddhi* in Ayurveda.[5] This condition is often linked to health problems like Diabetes, Obesity, Heart Disease, and Thyroid disorders. Dyslipidemia is a widespread concern and a modifiable

risk factor for cardiovascular diseases, which have now become a leading cause of mortality globally.[6] Many instances of Dyslipidemia are detected during routine lipid profile assessments.

There are many medicines available in allopathy for management of Hyperlipidemia. Some famous medicines are like Statins (Rosuvastatin, Atrovaststin etc.), Gemifibrozil, Ezetimibe, Benzafibrate etc., but there are some side effects or some undiscussed symptoms are seen. So, it is necessary to find out some alternative medicine which will not harm towards body, which is human friendly and also a cost effective. Ayurvedic treatments and dietary practices (*Ahara*) can contribute to preventing Dyslipidemia and offer a more holistic approach, complementing the use of allopathic medications, thus potentially reducing the burden of pharmaceutical interventions.

In this case study, treatment centred on *Haridradi Kwatha Ghanavati* provided positive results, highlighting its potential in addressing Dyslipidemia and *Sthaulya*

Aim: To study Effect of *Haridradi Kwatha Ghanavati* in The Management of *Dyslipidemia* in *Sthaulya.*

Objective: To study role of *Haridradi Kwatha Ghanavati* to reduce sign and symptoms of *Sthaulya* and Lipid Levels.

CASE REPORT

A 60-year-old Female patient having following complaints was came in OPD of Kayachikitsa Department, PDEA'S College of Ayurved and Research Centre, Nigdi Pune.

Chief complaints

Shwasadhikya
Atikshudha Ati-trushna
Aayas-Akshmata
Balahinata
Nidradhikya

} Since last 3-4 years Aggravated in last 6 months

History of Present Illness

60 years female patient came to OPD with Above complaints since last 3-4 years Aggravated in last 6 months. she was taking Allopathy medicines for same complaints in the last 6 months but she did not get relief completely. So for treatment, patient came to Kayachikitsa OPD for further treatment and management.

Past history: K/C/O: Hypertension and Dyslipidemia since last 10 years.

Present medicinal history: Tab. Telmikind 40 (Telmisartan 40mg) 1 tablet at morning
Tab. Ecosprin AV at Night (Aspirin 75mg+ Atorvastatin 10mg)

Family history: *Matruj Kula: Mruta* (H/O: Diabetes Mellitus)
Pitruj Kula: Jivit. (K/C/O: Hypertension)

Past surgical history: Tubal Ligation done 25 years ago.

General examination

Temperature	98.4 F
RR	18/ Min
Pulse rate	72 /Min
Blood pressure	140/90 mm of Hg

Systemic examination

RS	AEBE
CVS	S1 S2 Normal
CNS	Conscious, oriented
P/A	Soft and Non tender

Ashtavidha parikshan

Nadi	*Hansa Gati*
Mutra	6-7 times a day
Mala	*Asamyak*
Jivha	*Sama*

Shabda	*Spashta*
Sparsha	*Samshitoshna*
Druk	*Prakrit*
Akruti	*Madhyam*

Hetu[7]

Ahara: Snigdh (fatty food), *Madhur* (sweet), *Guru* (heavy to digest), *Navanna* (new *grains*), *Mansa* (Meat), *Goras* (dairy products), *Gaudik* (jaggery products), *Paishtik* (flour preparation containing more carbohydrate) *Vihara: Diwaswap, Achinta, Avyayam.*

Samprapti[8]

According to Charak, due to *Avarana* (obstruction) on all the *Strotas* (channels) by the *Meda*, there is *Vriddhi* of *kosthasthit Saman Vayu*, which increases *Koshtha Sthita Jatharagni*. The increase in *Jatharagni* leads to rapid digestion of consumed food and leads to craving for more food. If at all due to some reason the person does not receive more food the increased *Agni* causes self-*Dhatu Pachan*. But because of the hunger the persons tend to eat more and the cycle continues. In this way it becomes a vicious circle creating excessive formation of *Vikrita Meda Dhatu*, giving various symptoms. Because of such a condition of *Strotorodha*, the other *Dhatus* are not nourished properly causing *Dhatu Shaithilya* prior to *Meda Dhatu* and depletion of *Dhatus* next to *Meda* are observed. According to Sushruta, [9] *Kaphavardhaka Ahara, Adhyashana*, *Avyayama*, *Divasvapna* etc. leads to formation of *Aama Rasa* i.e., *Apachit Adya Rasa Dhatu*. The *Madhur Bhavayukta Ama Rasa* moves within the body, this *Ama* causes *Strotosanga* which leads to *Sthaulya.*

Samprapti ghatak

1) *Dosha:*
2) *Kapha: Kledaka*
3) *Pitta: Pachaka*
4) *Vata: Samana, Vyana*
5) *Dushya: Rasa, Mamsa and Medadhatu*
6) *Agni: Jathragni, Rasa and Meda Dhatvagni*
7) *Strotas: Medovaha Strotas, Rasavaha Strotas, Svedavaha Strotas, Udakavaha Strotas*
8) *Stroto Dushti: Sanga Margavoroddha, Amatah*
9) *Adhisthan: Particularly Vapavahana and Meda Dhatu Kala*
10) *Udhbhava Sthana: Amashya*
11) *Sanchara Sthana: Rasayani*
12) *Roga Marga: Bahya*
13) *Vyaktsthana: Sarvanga, Specifically Sphika Udara, Stana and Gala.*

Management: *Haridradi Kwatha Ghanavati*[10]

- *Drug: Haridradi Kwatha Ghanavati*
- *Matra:* 500 mg twice a day
- *Anupana: Sukoshna Jala*
- *Aushadhasevan Kala: Apan Kali*
- Duration: 3 months

Table 1: Latin Name, Family and Part use in *of dravya in haridradi kwatha ghanavati.*

No.	Drug	Latin Name	Family	Part Used
1.	*Haridra*	Curcuma Longa	Zingibraceae	*Moola*
2.	*Daruharidra*	Berberis Aristata	Berberdaceae	*Moola*
3.	*Indrayava*	Holarrhena Antidysentrica	Apocynaceae	*Beeja*
4.	*Yashtimadhu*	Glacyrrhiza Glabra	Fabaceae	*Kanda*
5.	*Prushniparni*	Uria Picta	Fabaceae	*Patra*

Table 2: *Rasa, Virya, Vipaka, Doshaghnata* and *Karma of Dravya* in *Haridradi Kwatha Ghanavati.*

No.	Drug	*Rasa*	*Vipaka*	*Virya*	*Guna*	*Karma*
1.	*Haridra* [11]	*Tikta, Katu*	*Katu*	*Ushna*	*Laghu, Ruksha*	*Lekhaniya*
2.	*Daruharidra* [12]	*Kashay, Tikta*	*Katu*	*Ushna*	*Laghu, Ruksha*	*Lekhaniya*
3.	*Indrayava* [13]	*Tikta, Kashaya*	*Katu*	*Sheeta*	*Alghu, Ruksha*	*Shodhghna*
4.	*Yashtimadhu*[14]	*Madhur*	*Madhur*	*Sheeta*	*Guru, Pichhil*	*Jivniya*
5.	*Prushniparni*[15]	*Madhur, Tikta*	*Madhur*	*Sheeta*	*Laghu*	*Shothaghna*

Table No. 3: Showing Observation and Results.

Symptoms	Gradation	Grade	BT	AT
Shwasadhikya	Absent	0	2	0
	Present on only heavy exertion	1		
	Present on only heavy exertion	2		
	Present at rest also	3		
Ati kshudha	As usual	0	3	1
	slightly increased 1-2 meals with normal breakfast	1		
	moderately increased 3-4 meals with heavy breakfast	2		
	markedly increased 4-5 meals with heavy breakfast	3		

Aayas-akshmata	Absent	0	3	0
	Works with efforts	1		
	Avoids heavy work	2		
	Tries to avoid light work	3		
Ati trushna	As usual	0	3	1
	Mild (upto 1-2 liter intake of water)	1		
	Moderate (2-3liter intake of water)	2		
	Severe (more than 3 liter intake of water)	3		
Balahinata	Absent	0	3	0
	Feels weakness occasionally	1		
	weakness after work or activity only	2		
	Weakness after mild work	3		
Nidradhikya	Samanya Nidra -6-7 hrs per day	0	3	1
	8-10 hrs Nidra per day	1		
	11-12 hrs Nidra per day	2		
	more than 12 hrs Nidra per day	3		

Lipid profile test	**BT**	**AT**	**Reference range**
Sr. Cholesterol	180.00	172.40	130-250 mg/dl
Sr. Triglycerides	168.00	119.20	40-160 mg/dl
Sr. HDL	45.48	50.35	30-80 mg/dl
Sr. LDL	98.72	103.66	0-150 mg/dl
Sr. VLDL	33.80	24.24	05-40 mg/dl
Cholesterol/HDL ratio	3.95	3.42	Upto 6.0
LDL/HDL ratio	2.17	2.06	Upto 4.5

There is 4 Kg significant reduction in weight was observed. relief was observed in the Symptoms as shown in Table No. 3. The significant improvement was observed in the values of Sr. triglyceride from lipid Profile.

DISCUSSION

In Ayurveda, dislipidemia is associated with a condition known as "*Medoroga*." The primary factor in *Medoroga* is an imbalance of *Kapha-Pradhana Tridoshas*, which leads to the accumulation of fat. This excess *Kapha* obstructs the movement of *Vata*, leading to its accumulation in the gastrointestinal tract and an increase in *Koshta Agni*. This causes a person to overeat even though the quality of the food consumed may not be nourishing (*Ama Rasa*). Consequently, this type of food intake contributes to the accumulation of fat (*Meda*) and the onset of *Medoroga*. The treatment for *Medoroga* involves a comprehensive approach. Medicines used should correct the digestive fire (*Agni*), balance the *Kapha*-dominant *Doshas*, and reduce excessive fat. *Haridradi Kwatha Ghanavati*, a formulation described in *Bhavprakash*, exemplifies such a remedy. The ingredients in *Haridradi Kwatha Ghanavati* possess qualities like Katu-*Tikta-Kashaya Rasa*, *Laghu-Ruksha Guna*, *Ushna Virya*, and predominantly *Katu Vipaka*. These qualities are particularly effective in managing the aggravated *Kapha* and reducing fat. The presence of *Katu Tikta-kashaya Rasas* and *Laghu-Ruksha Guna* in the ingredients aids in reducing the accumulation of fat. These qualities have a *Kapha*-reducing and drying effect, which helps to balance the aggravated *Kapha* and improve digestion. Some ingredients also possess digestive properties that aid in breaking down and digesting the excess, unwholesome food (*Ama Anna Rasa*), thereby preventing the formation of excessive fat. Furthermore, some ingredients exhibit *Rasayana* properties, which not only help in treating the disease but also in preventing complications. Phytochemical analysis and experimental studies of the *Haridradi Kwatha Ghanavati* ingredients reveal significant hypolipidemic (reducing lipid levels) effects. Many of these drugs contribute to lower total cholesterol (TC), triglycerides (TG), and LDL cholesterol (LDL-C) levels, while increasing HDL cholesterol (HDL-C). The antioxidant and free radical scavenging activities of these drugs protect against oxidative damage and lipid peroxidation. Additionally, certain ingredients regulate fat metabolism by decreasing lipogenesis and increasing lipolysis in visceral fat. This approach also results in a reduction in the atherogenic index, suggesting a potential preventive effect against coronary artery disease (CAD). In summary, *Haridradi Kwatha Ghanavati* is a well-rounded remedy in Ayurveda that addresses the multifaceted aspects of *Sthaulya* by balancing *Doshas*, improving digestion, reducing fat accumulation, and potentially preventing complications associated with dislipidemia.

CONCLUSION

Haridradi Kwatha Ghanavati predominantly has *Katu-Tikta-kashaya Rasa, Laghu-Ruksha Guna, Ushna veerya* and *Katu Vipaka.* These properties help in reducing the excessive *Meda.* They also normalize *Agni* thus leading to the formation of proper *Anna rasa* and *Medo dhatu.* Which helps in Relief in Symptoms as shown in table no.

3 and reduction of weight by 4 kg in duration of 3 months. Ingredients of *Haridradi Kwatha Ghanavati* possess hypolipidemic activity which helps in lowering the lipoprotein levels. Antioxidant and free radical scavenging activities of the ingredients help in preventing the progression of dyslipidemia, formation of atherosclerotic plaques and occurrence of complications.

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