INTERNATIONAL JOURNAL OF UNANI AND INTEGRATIVE MEDICINE

E-ISSN: 2616-4558
P-ISSN: 2616-454X
https://www.unanijournal.com
IJUIM 2024; 8(1): 82-86
Impact Factor (RJIF): 6.3
Peer Reviewed Journal
Received: 03-11-2023
Accepted: 07-12-2023

Dr. Charu Sharma
Associate Professor,
Department of Kaya Chikitsa,
Quadra Institute of Ayurveda,
Roorkee, Uttarakhand, India

Corresponding Author:
Dr. Charu Sharma
Associate Professor,
Department of Kaya Chikitsa,
Quadra Institute of Ayurveda,
Roorkee, Uttarakhand, India

A case study on effect of ayurvedic medication along with Virechana karma in the management of dyslipidemia

Dr. Charu Sharma

DOI: https://doi.org/10.33545/2616454X.2024.v8.i1a.263

Abstract
Dyslipidemia is a precursor to several fatal illnesses in the future. The incidence of coronary heart disease increases by 1-2% for every 1% increase in cholesterol levels. It is a metabolic lifestyle disorder brought on by poor eating habits, insufficient exercise, stress, and other factors. Since dyslipidemia is not specifically mentioned in Ayurveda. However, because of the similarities in its etiopathogenesis and clinical characteristics, it could be grouped along with Medosroto Dusti, Santarpanjanyavyadhi, and Medopradoshaja Vikara. Bahudoshawastha and Santarpanajanya Vyadhi can be treated with Virechana Karma. The purpose of this research was to use Virechana Karma to treat dyslipidemia. The evaluation of dyslipidemia both before and after therapy was done using a lipid profile. The Male patient in this case, 40 years, complained of weight gain, exhaustion, sleepiness, bodily heaviness, and hyperacidity during the previous three years. Triglycerides, VLDL, and total cholesterol were all elevated before to Virechana Karma. Significant improvements were observed in the levels of VLDL, triglycerides, and total cholesterol following Virechana Karma. The symptoms completely subsided. The patient was lost 5 kg weight. This improvement could result from the elimination of aberrant lipids from the body, the rectification of Agni by Virechana Karma, and the qualities of Mustadi Kwatha, Ruksha, Tikshna, Srotoshodhaka, Lekhana, Kaphamedahar, and Agnivardhaka. Thus, it can be inferred from this study that Virechana Karma is a safe and effective treatment for dyslipidemia.

Keywords: Dyslipidaemia, santarpanjanya vyadhi, bahudoshawastha, medopradoshaja vikara, etc.

Introduction
Urbanization has forced man to adjust to a fast-paced way of life through dietary and behavioral changes that are adequate for survival but unhealthy for other living creatures. As a result, a number of ailments known as "lifestyle diseases" have become more prevalent. Dyslipidaemia, often known as the "disorder of lipoprotein," is one such illness that involves either an excess or a deficit of lipoprotein [1]. Thus, it results in abnormal blood levels of lipids (such as fat and/or cholesterol). Elevations of total cholesterol, low-density lipoprotein cholesterol (LDL), triglycerides, and very low-density lipoprotein cholesterol (VLDL) as well as a decrease in the blood's concentration of high-density lipoprotein cholesterol (HDL) are indicative of dyslipidemia, or the abnormal presence of one or more types of serum lipids [2].

The main contributing causes include poor eating practices, such as consuming more sugar and processed carbohydrates and foods high in cholesterol, trans and saturated fats, and oils. Eating at the incorrect time of day, a family history of dyslipidemia, disorders such as diabetes mellitus, obesity, hypertension, and alcohol, tobacco, and smoke addiction. Advanced age, a sedentary way of life, inactivity, stress, etc.

The risk factors for developing cardiovascular diseases (CVDs) are increased by dyslipidemia. Every year, CVDs cause more fatalities than all other diseases combined since they are the main cause of mortality [3]. It is estimated that 56% of ischemic heart disease and 18% of cerebrovascular disorders worldwide are caused by hypercholesterolemia [4]. Over the past 20 years, CVD has become so common in India that it now accounts for 24% of all fatalities among persons between the ages of 25 and 69 [5].

Medoroga is a single contributing factor in several disorders associated with a lifestyle (Dyslipidaemia). A structural element of several types of cell membranes is lipid. Lubricity is a typical Snehatwa feature of lipids. Since sneha is found in Medo Dhatu, Vasa, and Majja

Dhatu, it can be linked to lipids. In a morbid form, sneha can lead to both Rasagata Snehavriddhi and Medodushti (dyslipidaemia) [6]. When Nidanas (physical inactivity) such as Snigdha, Guru, Picchila Guna, and Chesthadvesha vitiate Doshas, it results in Santarpanajanya Vyadhis. Agni Vikriti is the product of those morbid Doshas. Consequently, the Ama proceeds directly to Medodhatu, where it combines with Kapha at the tissue level, increasing Meda Dhatu.

As a result, Dosha channels get obstructed, resulting in Srotasavrodha. Vata in the Kostha then creates Jatharagni Sandhukashan, which in turn promotes food cravings and overindulgence in food, ultimately leading to Medoroga [7]. Two Ayurvedic disorders that are closely related to hyperlipidemia that may be studied to better understand dyslipidemia are Atisthaulya, also known as Medoroga, and Prameha. Considering that there are no clear Ayurvedic references that are connected to dyslipidemia. Hyperlipidemia and hyperlipoproteinemia caused by aberrant lipoproteins in the blood are included in dyslipidemia. illnesses like Prameha and obesity, Pitta, Kapha, and Rakta illnesses, etc., are brought on by aggravated Medo Dhatu and have Bahu Doshawastha and are almost Santarpana Janya Vyadhi [8].

Bahudoshawastha and Santarpana Janya Roga's method of therapy is called samshodhana [9, 10]. The most effective method for removing highly vitiated Dosha and balancing Agni, the fundamental element in the etiology of all rogas, is Virechana Karma (Purgation). The liver is an essential Pitta Sthana organ that is mostly engaged in lipid metabolism. The main therapy for vitiated Pitta and Pitta Sthana is called Virechana Karma [11]. Morbid Kapha and Vata Doshas are also expelled from the body in addition to Pitta [12].

Case Report

Present Chief Complaints

The patient, a 40-year-old Male,

Complaint

- Weight Gain
- Exhaustion
- Sleepiness
- Bodily Heaviness
- Hyperacidity

} Approx. 3 years

History of Past Illness: No history of DM TYPE 2, HTN, Thyroid disorder, Allergic reactions.

Drug History: Atorvastatin 20 mg and Methylcoblamin 3mcg twice daily for two months.

Personal History

He was eating foods high in saturated fat, such as butter, ghee and cheese, He didn't exercise much as, he was usually exhausted.

General Examination

- **General condition:** Good.
- **Pulse rate:** 78/min.
- **RR:** 18/min.
- **BP:** 130/70 mm hg.
- **Weight:** 72 kgs.
- **Height:** 165 cm.
- **Temperature:** 98.6°F.
- **BMI:** 26.4 kg/m^2.

Rogipariksha

- **Prakriti:** Pitta-Kaphaja.
- **Sara:** Medo sara, Mamsa sara.
- **Satva:** Madhyam.
- **Samhanana:** Madhyam.
- **Koshta:** Mrudu Koshti.
- **Agni:** Rasadhatu Agni Medhodhatu Agni, Mamsagni.
- **Aharshakti:** Madhyama.
- **Jaranshkti:** Madhyama.
- **Vyayamshakti:** Madhyama.
- **Vaya:** Adult.
- **Jihawa:** Niram.

Diagnosis

- National cholesterol education program (NCEP).
- ATP III classification of total cholesterol.
- LDL cholesterol.
- HDL cholesterol [13].

Investigations: (Before and After Treatment)

On initial assessment investigation revealed that the level of S. Cholesterol (T), VLDL and triglyceride was high. So Virechana Karma with Mustadi Kwatha was planned.

Table 1: Details of virechana karma (therapeutic purgation)

Procedure	Drugs and Dose	Duration
Deepan and *Pachan* (enhancing metabolic fire and enhancing digestion)	It was recommended to take two tablets of Agnitundi Vati for Deepana Pachana before meals and five grams of Avipattikara Churna with warm water before bed.	7 days
Snehapana (Internal therapeutic oleation internally)	Beginning with a 25 ml intake, Mahatriphala Ghrita was progressively raised based on the patient's Agni (digestive fire) and Bala (capacity) until the seventh day, until Samyak Snehana Lakshana (oiliness in the skin and ghee coming with feces) was attained. Use warm water to empty your stomach.	7 days
Sarvanga Abhyanga and Vashpa Sweda (therapeutic oil massage and sudation therapy)	For the following three days, Dhanwantri taila would have complete body massages (Sarvanga Abhyanga) and therapeutic oil massages (Vashpa Sweda), performed in the morning.	5 days
Virechana karma (therapeutic purgation)	Regarding Virechana Karma (medical purgation) Virechana medications Draksha Kwath 250 ml and Trivritt Avleha 50 gm were administered in the morning following a full body massage and sudation treatment.	1 Day
Sansarjan Karma (post therapy dietic regimen for revival)	Shuddhhi recommended Sansarjan Karma, a post-therapy dietetic regimen for rejuvenation, for five days.	5 days

Table 2: Treatment protocol

Drug sed	Dose	Root	Duration
Arogyardhini Vati	2 Tablets (each 250 mg) twice a day after meals with warm water.	Orally	60 days
Mustadi Kwatha	30 ml twice a day empty stomach morning and evening	orally	60 days

Observations and Results

The patient had 28 Vegas and Kaphanta Shuddhi. So, the Shuddhi was Pradhana. The outcomes were assessed before Deepana Pachana and after Sansarjana Krama. Even after completion of treatment patient lost 5kg. Patient felt relief in hyperacidity, lightness in body and felt more energetic and refreshed. There was significant improvement in the symptoms as level as the objective parameters given below-

Table 3: Biochemical parameters before and after treatment

Biochemical Parameters	Before Treatment	After cleansing Therapy (Virechana)	After Treatment
Body weight	72 kg	70 kg	67 kg
BMI	26.4 kg/m^2	25.3 kg/m^2	24.6 kg/m^2
Serum Cholesterol Total	243 mg/dl	219 mg/dl	210 mg/dl
Serum Triglycerides	389 mg/dl	165 mg/dl	132 mg/dl
Serum HDL Cholesterol	41.76 mg/dl	43.0 mg/dl	44 mg/dl
Serum LDL Cholesterol direct	159.0 mg/dl	137.0 mg/dl	142 mg/dl
Serum VLDL Cholesterol	65.35 mg/dl	34.0 mg/dl	34 mg/dl
Non -HDL Cholesterol	225.45 mg/dl	169 mg/dl	169 mg/dl
Serum Uric Acid	7.95 mg/dl	-	5.1 mg/dl

Discussion

Agnimandya (diminution of digestive fire) is the cause of dyslipidemia, which in turn causes Medo Vaha and Rasa Vaha Stroto Dushti (vitiation of channels conveying nutritional fluids and fat tissue). Based on the concepts of Sthaulya [13] (obesity), Medovaha Stroto Dushti (vitiation of channels conveying fat tissue) is treated. As a result, treatments such as Deepana (increasing metabolic fire), Pachan (improving digestion), Kaphaghna (pacifying Kapha), and Medo Nashak (pacifying fat tissue) were employed. Given that it is a Santarpan Janya (caused by nourishing procedure) and Bahu Dosha Avastha (including numerous regulatory functional factors of the body), special diet and exercise regimens were incorporated, along with Apatarpana Chikitsa (depleting factors) including Shodhana Chikitsa (major purification therapy) and Shamana Chikitsa (palliative therapy) [14, 15].

It has been stated that while the morbid Doshas (toxins) suppressed by the direct administration of Aushadhi (medicines) may occasionally be reactivated, there is no chance of this happening with respect to those suppressed by Samshodhana (cleaning methods) [16, 17]. This is the reason why purging, or Virechana, is done for Shodhana before a medicine is administered.

Virechana, or therapeutic purgation, plays a variety of roles in the rectification of Agni (metabolic factors) at all levels, from Deepan-Pachan (increasing metabolic fire and digestion) to Samsarjan Karma [18] (post treatment dietic regimen for resurrection). Due to its Aam Pachaka (digestion/metabolism of undigested food items) and Agni Deepana (increasing metabolic fire) properties, Agnitundi Vati [19] was achieved [20-21]. Sweat is a by-product of Medo dhatu, or fat tissue [22]. Due to its Ushna guna (hotness) and Tikshna guna (sharpness), sweating causes the body's metabolic rate to rise. Heat, or ushna guna, causes capillaries to dilate and sympathetic nervous system activity to rise, which improves circulation.

Likewise, improved circulation facilitates waste product excretion and Sneha (oleation aiding substance) absorption through the skin. Consequently, the waste products in the form of fat tissue are mobilized in tandem by Snehan (therapeutic oleation) and Swedana (sudation) [23]. There are two ways to describe how Virechan karma, or therapeutic purgation, works: Therapeutic purgation, or vivechana karma, is a process that excretes a significant amount of bile, which indirectly aids in the elimination of cholesterol. Additionally, by eliminating the free radicals (oxidants) that are present in the microcirculatory channels, the therapeutic purgation treatment known as "virechana" helps to open and cleanse the channels and increases the bioavailability of medications [24, 25].

Probable Mode of action

Arogyavardhini Vati

Due to its qualities, Arogyavardhini Vati [26] may be helpful in cases of dyslipidemia. The main component of Arogyavardhini Vati, katuki (*Picrorhiza kurroa*), balances the Kapha Dosha and has a choleretic effect because of its Ruksha (dry) and Laghu Guna (light), Tikta Rasa (bitter taste), and Katu Vipka (assimilate and turn into pungent) qualities [27, 28]. The bitter, pungent, and harsh tastes of guggulu (*Commiphora mukul* (Hook. Ex Stocks) Engl.) demonstrate the herb's Medohara (pacifying fat tissue) activity [29]. Arogyavardhini Vati has anti-inflammatory properties as well. Thus, this may be the cause of elevated HDL levels. One ingredient of Shilajitu, or mineral pitch, is humic acid, which has anti-atherogenic properties [30]. It has been demonstrated that amlaki (*Phyllanthus emblica* L.) increases HDL production while decreasing triglyceride synthesis. It also lowers HMG CoA reductase activity, which in turn prevents cholesterol from being synthesized, and facilitates the uptake of cholesterol into cells. Additionally, studies on the benefits of Arogyavardhini Vati for managing metabolic syndrome have been conducted, and the results show a reduction in the lipid profile [31].

Mustadi Kwatha

Musta (*Cyperus rotundus*), Patola (*Trichosanthes dioica*), Khadira (*Acacia catechu* (Roxb.) Willd.), Nimba (*Azadirachta indica* A. Juss.), Haridra (*Curcuma longa* Roxb.), and Kutaja (*Holarrhena antidysenterica* (Roth.) A.DC.) are among the ingredients in Mustadi Kwatha [32] because of their Laghu (light), Ruksha (dry), and primarily Katu (pungent taste) and Tikta rasa (bitter taste), which

balance Kapha dosha and encourage Deepana (increasing metabolic activity) [33]. Aragwadh (*Cassia fistula* L.) has hepato-protective properties and acts as a laxative to help the body eliminate Dosha, which are regulatory functioning elements. *Phyllanthus emblica* L, *Terminalia chebula* Retz., and *Terminalia bellirica* Roxb., together known as triphala, raises HDL levels while inhibiting the rise of LDL, VLDL, and blood glucose levels.

Agnitundi Vati

Agnitundi Vati is used to maintain a healthy balance of the three doshas, namely Vata, Pitta and Kapha. For Vata: Agnitundi Vati helps in pacifying Vata dosha. It provides relive from joints pain, stiffness and cramps due to Vata imbalance

Conclusion

The incidence of coronary heart disease increases by 1-2% for every 1% increase in cholesterol levels. The abnormally high blood lipid content caused by poor lipid metabolism is known as dyslipidemia. Agni Vaishamya is the main factor, with participation from Medo Dhatu, Medovaha Srotas, Bahudoshavastha, and Santarpana Janya Vyadhi. Thus, the greatest way to rectify Agni and Anuloman of Vata Dosha is by Virechana Karma. Tikshna Ushna Katu Dravya are utilized for Chikitsa of Kapha Dosha; they were selected for Virechana Karma. Thus, Virechana Karma was highly successful in lowering VLDL, triglycerides, and cholesterol. Therefore, it can be said that herbal medicines along with dietary changes and lifestyle adjustments can help control these kinds of diseases and safely avoid their negative effects.

Conflict of Interest: NIL.

Source of Support: None.

References

1. Joshi S, Anjana R, Deepa M, Pradeepa R, Bhansali A, Dhandania V, *et al*. Prevalence of Dyslipidemia in Urban and Rural India: The ICMR-INDIAB Study. PLoS ONE. 2014;9(5):e96808.
2. MSD Manual Professional Edition; c2020 [cited 3 NOV 2021]. Available from: https://www.msdmanuals.com/professional/endocrine-and-metabolic-disorders/lipid-disorders/dyslipidemia
3. Acharya YT, Samhita C, Sthana V. Ch-5/27. Chaukhambha, Surabharati Publications, Varanasi, reprint; c2008. p. 178.
4. Paradkar HS, editor. Ashtang Hridaya, Sutra Sthana; Doshopkramaniyam. Ch. 13, Ver. 25. Reprint Edition. Varanasi: Chowkhamba Krishnadas Academy; c2006. p. 167.
5. Paradkar HS. Ashtang Hridaya Sutra Sthana; Ch. 11, Ver. 10. Reprint Edition. Varanasi: Chowkhamba Krishnadas Academy; c2006. p. 65
6. Acharya YT. Charaka Samhita, Vimana Sthana Ch.5. Chakrapanidatta, Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 198.
7. Acharya YT, Charaka Samhita, Sutra Sthana Ch.21 ver.34. Chaukhambha, Surabharati Publications, Varanasi, reprint; c2008. p. 95.
8. Metabolic-syndrome [cited on 2021 Jan 23] Available from: https://www.nhlbi.nih.gov/health-topics/metabolic-syndrome.
9. Magkos F, Yannakoulia M, Chan JL, Mantzoros CS. Management of the metabolic syndrome and type 2 diabetes through lifestyle modification. Annu Rev Nutr. 2009;29:223-256.
10. Common-side-effects-cholesterol-meds [cited 23 Aug 2020] Available from: https://www.webmd.com/cholesterol-management/common-side-effects-cholesterol-meds.
11. Acharya YT, Samhita C. Vimansthana Ch.5 ver-43. Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 479.
12. Acharya YT, Samhita C, Sthana S. Ch-16, Verse no-20. Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 351.
13. Acharya YT. Charaka Samhita Sidhhi Sthana 1/11. editor. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 678.
14. Mishra S, Bhaisajyaratnavali. Chapter no-8, Verse no 26-27, Varanasi: 1st edition, Chaukhamba Surbharati Prakashana; c2012. p. 367.
15. Acharya YT, Samhita C, Sthana S. 17/24. Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 87.
16. Acharya YT. Charaka Samhita, Viman Sthana Ch.5/34. Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 104.
17. Shastri K. Charak Samhita, Chikitsa sthana Ch 15/22, Chaukhamba Bharti Academy, Varanasi. 2013. pg 234.
18. Mishra S. Bhaisajyaratnavali. Kustharogadhikara, Chapter no-54, Verse no-117, Varanasi: 1st edition Chaukhamba Surbharati Prakashana; c2012. p. 140.
19. Varsakiya J, Goyal MR, Thakar AB, Donga SB, Kathad D. Role of Shodhana with Haritakyadi Yoga in Increasing Sperm Count in the Case of Oligozoospermia: An Open-labeled Clinical Trial. J Res Ayurvedic Sci. 2018;2(4):233-239.
20. Acharya YT, Agnivesha, Charaka, Dridhabala. Charaka Samhita. Siddhi Sthana, Ch. 2/6. Narayana Shashtri, editor. Varanasi: Chaukhambha Bharati Academy; c2013. p. 860-861.
21. Pooja B, Bhatted S. A standard controlled clinical study on Virechana Karma and Lekhana Basti in the management of dyslipidemia (Medoroga). AYU (An international quarterly journal of research in Ayurveda). 2016;37(1):32.
22. The Ayurvedic pharmacopoeia of India. Part I, Vol. II, 1st ed. New Delhi, Ministry of Health and Family Welfare, Department of AYUSH; c1999. p. 34.
23. Gupta Y, Kumar G, Srivastava A, Sharma S. Safety and efficacy evaluation of Ayurvedic treatment (Arjuna powder and Arogyavardhini Vati) in dyslipidemia patients: A pilot prospective cohort clinical study. AYU (An International Quarterly Journal of Research in Ayurveda). 2012;33(2):197.
24. The Ayurvedic pharmacopoeia of India. Part I, Vol. I, 1st ed. New Delhi, Ministry of Health and Family Welfare, Department of AYUSH; c1999.
25. Evaluation of Shilajatu for improvement in quality of life in patients of Diabetes Mellitus. International Journal of Traditional and Complementary Medicine; c2017.
26. Padhar BC, Dave AR, Goyal M. Clinical study of

Arogyavardhini compound and lifestyle modification in management of metabolic syndrome: A double-blind placebo controlled randomized clinical trial. AYU. 2019;40:171-178.
27. Acharya YT. Charaka Samhita, Sutra Sthana Chapter no-23, Verse no-34-35. Chaukhambha Surabharati Publications, Varanasi, reprint; c2008. p. 98.
28. Sharma PV. Dravyaguna Vijnana Vol II, Chaukhamba Bharati Academy, Varanasi; c2012. p. 434.
29. Triphala and Cardiovascular Health, Ayush Herbs, Ayurvedic Herbal Medicine [Internet]. Ayush.com; c2020 [cited 1 Dec 2021] Available from: https://www.ayush.com/triphala-and-cardiovascular-health.
30. Shastri AD. Sushruta Samhita, Sutra Sthana, ch 45/36. Chaukhamba Sanskrit sansthan, Varanasi; c2013. p. 178.
31. Sen KGD. Bhaisajyaratnavali. Siddhipada Hindi Commentary, Prof. Siddhinandana Mishra editor. 1st edition. Chapter no-53, Varanasi: Chaukhamba Surbharati Prakashana; c2012. p. 142.
32. Sahu S, Nayak NR, Kande A. A critical review of Pathya Apathya in Dyslipidemia. Journal of Ayurveda and Integrated Medical Sciences. 2024;9(1):149-154. https://doi.org/10.21760/jaims.9.1.21
33. Varsakiya J, Drishya D, Kathad D. Role of Ayurvedic remedies in management of Dyslipidemia - A Case Report. Int. J AYUSH CaRe. 2022; 6(1):14-22.

How to Cite This Article
Sharma C. A case study on effect of ayurvedic medication along with Virechana karma in the management of dyslipidemia. International Journal of Unani and Integrative Medicine. 2024;8(1):82-86.