Journal of Pharmaceutical and Scientific Innovation

www.jpsionline.com (ISSN: 2277–4572)

Research Article

CLINICAL STUDY ON EFFECT OF VAMANA AND UDVARTANA KARMA IN THE MANAGEMENT OF STHOULYA

Jyoti [1], Sidram Guled [2]*

[1] Associate Professor, JSS Ayurveda Medical College, Lalithadripura, Mysore. Karnataka. India

[2] Assistant Professor, Government Ayurveda Medical College, New sayyajirao road, Vishweshwarayya circle, Mysore, Karnataka. India

*Corresponding Author Email: drsmguled@gmail.com

ABSTRACT

Introduction: The incidence of Obesity is increasing day by day in more percentage due to sedentary lifestyle and food habits and is resulting into many serious systemic complications. Sthoulya is kapha pradhana and medo-pradoshaja vyadhi. Charaka samhita mentioned Sthoulya disease under the eight varieties of personalities which are designated as Astha Nindita Purusha. Sthoulya is kapha and meda predominant vyadhi and vamana karma is prime therapy and it eliminates kapha and meda. Udvartana is another important therapy in Sthoulya that results in kapha meda vilayana and hence the present study is entitled as "Clinical study on effect of Vamana and Udvartana karma in the management of Sthoulya" was planned. Aims and Objectives: To evaluate the efficacy of the Vamana karma, Udvartana in Sthoulya and to compare and assess the effect of both the therapies. Materials And Methods: Total 30 patients were selected, distributed in 2 equal groups, Group A treated with Vamana karma and Group B treated with Udvartana. Observations And Results: The progress was assessed based on subjective parameters considered by giving scores to the clinical signs and symptoms and objective parameters were done before treatment and after treatment with a specially prepared case proforma. Discussion and Conclusion: All the patients in both groups were responded positively without any complications. Group A with Vamana showed highly significant results in symptoms; Atikshudha, Ati pipasa, Nidradhikya, Shrama and Hyperlipidemia. Group B with Udvartana also showed highly significant results in symptoms like Nidradhikya, Swedadhikya, Dourgandya, Shrama and Alasya.

Keywords: Vamana, Madanaphalapippali yoga, Udvartana, yava-mudga-haritaki churna, Sthoulya, Obesity.

INTRODUCTION

Major advances in the understanding of overweight and obesity confirm that they constitute an important medical condition. Obesity exacerbates many health problems, both independently and in association with other diseases. In India more than 135 million people are obese and among them 11.8%-31.3% are peripheral obese and 16.9%-36.3% are centrally obese. Intake of high energy value dense foods, sedentary lifestyle, lack of medical services and lower economy, the developing countries are facing more prevalence of obesity and their complications like, diabetes, IHD, etc. In India, abdominal obesity is main reason for cardiovascular events. Obesity can no longer be regarded simply as cosmetic problem affecting certain individuals but must be considered an epidemic requiring effective measures for its prevention and management.[1]

Sthoulya roga is a kapha pradhana and medo-pradoshaja vyadhi, which affect social, physical and mental faculties of the person.[2] According to Charaka, Sthoulya is a Bahudoshaja and Santarpana janya vyadhi.[3] In maintenance of the health of an individual and to cure the diseases; equilibrium of dosha-dhatu poshana kriya is an essential factor.[4] The panchakarma is the prime therapy which fulfills both above aims and objectives. Panchakarma again broadly practiced in two major ways; Antaparimarjana (internal procedures of shodhana) and Bahirparimarjana (external procedures of shodhana) chikitsa.[5]

Among the Antaparimarjana chikitsa, Vamana is the choice of therapy for kapha-medo pradoshaja vikara.[6] Among the Bahirparimarjana chikitsa, Udvartana will be better in kapha-vata harana and kapha-meda vilayana.[7] Hence, Vamana and Udvartana were selected for its effective and safe management of sthoulya. The present study is entitled, **"Clinical study on effect of Vamana and Udvartana karma in the management of Sthoulya".**

Objectives of the study

The study was intended to evaluate the efficacy of Vamana karma, Udvartana karma in Sthoulya and to compare and assess the effect of both the therapies.

MATERIALS AND METHODS

For Group A (Vamana)

Murchita ghrita for Snehapana, Murchita tila taila for Abhyanga and Madanaphala pippali yoga for Vamana was administered.

For Group B (Udvartana)

Yava churna, Mudga churna and Haritaki churna were used for Udvartana.

Source of Data

Patient of either sex diagnosed as Sthoulya were selected from OPD, IPD, special camps conducted at Sri Siddharoodha Charitable Hospital, attached to N. K. J. Ayurvedic Medical College & P.G. research Centre Bidar, Karnataka, and from other

referrals and associated hospitals of the city. The study was ethically approved by institutional ethical committee.

Inclusion Criteria

1. Patient age group between 20 to 50 years irrespective of sex, religion, socioeconomic status and occupation.
2. Patients who were fit for Vamana karma for Group A and Udvartana karma for Group B
3. Patients having BMI 25 to 35 were taken for the study.

Exclusion Criteria

1. Patients having BMI more than 35 were excluded
2. Patients suffering from other systemic diseases that interfere with intervention
3. Patients of sthoulya suffering with hormonal imbalance.
4. Pregnant ladies and Lactating mother.

Diagnostic Criteria

- Subjects were diagnosed based on signs and symptoms of sthoulya
- Subjects having BMI above 25

Investigations

1. Routine investigations RBS, CBC, ESR and Urine were carried out.
2. Lipid profile

Research Design
Double arm open labelled randomized clinical study

A total of 30 volunteers of Sthoulya were distributed in 2 equal groups such as –

Group-A: 15 Patients were administered Vamana karma with madanaphala pippali yoga.

Group-B: 15 Patient were advised Udvartana with Churna of Yava, Mudga and Haritaki for 10 days.

Subjects of both the groups were advised specific diet chart during the therapy and till follow up complete.

Intervention

Group A: (Vamana Karma)
Deepana pachana was given with Trikatu churna 3-5 gm before meals for 3 days. Snehapana was administered with Murchita goghrita, 30 ml on first day, day by day dose was increased on the basis of Agni, administered in the morning empty stomach before appearance of kshudha for 3-7 days till samyak snigdha lakshana were observed.[8] Abhyanga with Murchita tila taila and Bhaspa sweda on day of vishrama kala and on the day of Vamana karma.[9] On the day of Vamana karma[10], Akantha pana with ksheera 1.5 to 3 liters was administered first then, Vamaka yoga of Shodhita Madanaphala Pippali churna 4 Part (8-10gms), Vacha churna, 2 Part (4-5gms), Saindava lavana: 1 Part (2-2.5gms) and Madhu in required quantity was given. Yasthimadhu phanta 3-7 liters and ushna lavanodaka 1-3 liters as Vamanopaga dravya advised. After samyak Vamana, Dhumapana with dhumavarti was performed. Subjects were adviced Peyadi samsarjana krama as per the Shodhana for 3-7 days.[11]

For Group B
Udvartana Karma was performed with Yava, Mudga and Haritaki yavakuta churna in equal quantity for 10 days.[12]

Follow up

Two follow up for each group was carried out on 15th day and 30th day after completion of intervention.

Assessment Parameters

Assessment was done on pre and post-test values of subjective and objective parameters.

Subjective Parameters

Chala - Stana, udar, sphik lambanam, Atikshudha, Ati pipasa, Nidradhikya, Swedadhikya, Dourgandya and Shrama were the subjective parameters of the study.

Objective Parameters

1. Body weight.
2. BMI (Body mass index)
3. Measurement of Mid-arm circumference, Mid-Thigh circumference, Chest circumference, Waist circumference, Abdominal circumference, and Abdominal skin folds.
4. Lipid profile

Assessment of the effect of treatment was done based on the relief in the subjective as well as objective parameters. The score pattern was followed and recorded before & after the treatment and assessed for outcome through the statistical analysis.

RESULTS

Group A and Group B both showed highly significant results in Atikshudha, Nidradhikya, Swedabhada, Shrama, Weight and BMI with P <0.01, Statistically significant results in Chest circumference, Waist circumference, Mid arm circumference, Mid-thigh circumference and Abdominal circumference with P<0.05 and Statistically Non-significant results in Chala-spik-udara sthana, Dourgandya and Skin fold thickness with P>0.05.

Group A showed highly significant results in Ati pipasa and Group B showed Statistically significant results in Ati pipasa. In reduction of Weight (5.14% reduction) and BMI (5.7% reduction), Group A (Vamana) showed better results than Group B. In parameters like, Chest circumference, Waist circumference, Mid arm circumference, Mid-thigh circumference and Abdominal circumference Group B (Udvartana) showed better results than Group A (Vamana).

In Lipid profile, Group A showed highly significant results in Serum Total Cholesterol (19.3% reduction), LDL (12.8% reduction), VLDL (19.1% reduction) and Triglycerides with P<0.01 and Nonsignificant results in HDL. Group B showed highly significant results in HDL, LDL and VLDL, significant results in Triglycerides and Non-significant results in Total Cholesterol.

DISCUSSION

The vamana drugs possessing ushna, tikshna, sukshma, vyavaya and vikasi properties remove Kapha dosha from Amashaya which is moola sthana of kapha and also from different srotasas of sharira.[13]

Kapha is the main dosha for manifestation of Sthoulya and Atikshudha, Atitrishna, Swedawarodha, Klaibhya, imbalance in the nourishment of all dhatus, etc. complications of Sthoulya are because of Avarana (Occlusion) by Kapha.[14] Vamana helps in the removal of Kapha there by relieving occlusion, so that the main samprapti and Samprapti of different complications are relieved.

Vamana is the best measure to remove the vitiated Kapha and also the medas which is the ashraya of kapha. Vamana helps to remove the kleda from the body and thereby helping to decrease the weight. The snehapana carried out in Vamana helps in excess secretion of bile, which is the result of excess breakdown Cholesterol, Abhyanga and Sweda further liquify the dosha and meda dhatu and are removed effectively by the process of Vamana. Ushna and Tikshna properties of Swedana helps to burn the excess calories accumulated in subcutaneous tissues.

Yava, Mudga and Haritaki churna used for the Udvartana procedure, possess ruksha, lekhana, kashaya-katu rasa. When Udvartana advocated with these dravyas, helps in the removal of excess kapha dosha and meda dhatu from the body, especially from peripheral parts of the body. Not only the drugs used in the Udvartana, but the garshana process (rubbing) also have lekhana effect on kapha and meda by metabolizing subcutaneous fat. When peripheral fat is metabolized, the complications of Sthoulya like, Swedabhada, Dourgandya, Atisweda, flabby skin folds, Kandu are corrected.

The drugs applied and rubbed over skin were digested by Bhrajaka pitta which is present in the skin, its ushna-veerya enter rasadhatu because twak is one of the ashraya for Rasadhatu, remove the obstruction in the rasa and swedavaha srotas. By the Veerya of the dravya produce systemic effect and resolve the dosha dushya sammurchana.

Udvartana also brings Sthiratwa (provides stability to body parts), Twak prasadana (rejuvenates the skin and brings better complexion), lightness in body, and removes Tandra (sleepiness), Kandu (itching), Mala (toxins though skin) and reduces **Sweda.**[15,16]

Vamana is more helpful in the removal of Kapha and Meda from all over the body and useful in correcting Kshudha, Trishna, Agni and Avarana. Udvartana karma helps in the removal of Kapha and Meda from peripheral region more than in general there by helping more in increasing skin and muscle tone, complexion of skin and shaping the body.

CONCLUSION

Sthoulya is a Kapha pradhana, vatanubandha and medo-pradoshaja vyadhi. Incidence of Sthoulya is increasing day by day due to the change in lifestyle and food habits, so community should be made aware regarding the prevention of disease and its complications. Vamana group shows highly significant results on Sthoulya, specially on the symptoms like Atikshudha, Ati pipasa, Nidradhikya, Shrama and Hyperlipidemia. It is found that there was reduction in LDL, VLDL, Triglycerides and Total Serum cholesterol.

Udvartana group shows highly significant results on sthoulya, specially on the symptoms like Nidradhikya, Swedadhikya, Dourgandya and Shrama. In Lipid profile, reduction was observed in VLDL, Triglycerides and rise in HDL that is a good cholesterol. Hence further studies required in long term duration of course, along with large scale of the patients to assess and get better results. To prove scientifically the exact mode of action,

highly equipped Research centers are required for the global acceptance of Ayurvedic therapies.

REFERENCES

1. Ahirwar R, Mondal PR. Prevalence of obesity in India: A systematic review. Diabetes and Metabolic Syndrome. 2019 Jan-Feb;13(1):318-321. doi: 10.1016/j.dsx.2018.08.032. Epub 2018 Sep 21. PMID: 30641719.
2. Sushruta, Nibhanda Sangraha commentary by Dalhana, Nyayachandrika by Gayadasa. Sushruta Samhita: Sutrasthana; Doshadhatumala kshaya vriddi vijnaniya adhyaya; 32nd sutra. Reprint edition. Varanasi: Chaukhambha Krishnadas Academy; 2004. p. 73.
3. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Sutrasthana; Santarpaniya adhyaya; 6th suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 122.
4. Sushruta, Nibhanda Sangraha commentary by Dalhana, Nyayachandrika by Gayadasa. Sushruta Samhita: Sutrasthana; Doshadhatumala kshaya vriddi vijnaniya adhyaya; 41st sutra. Reprint edition. Varanasi: Chaukhambha Krishnadas Academy; 2004. p. 75.
5. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Sutrasthana; Tistraishaniya adhyaya; 55th suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 78.
6. Sushruta, Nibhanda Sangraha commentary by Dalhana, Nyayachandrika by Gayadasa. Sushruta Samhita: Chikitsasthana; Vamanavirechana sadya upadrava chikitsa adhyaya; 18th sutra. Reprint edition. Varanasi: Chaukhambha Krishnadas Academy; 2004. p. 518.
7. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Sutrasthana; Asthouninditiya adhyaya; 21st suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 117.
8. Kasture H.S, Ayurvediya Panchakarma Vignana: Snehana vignana adhyaya; 8th edition. Kolkata: Shri Baidhyanath Ayurveda Bhavan Ltd; 2004. p.82.
9. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Kalpasthana; Madana kalpa adhyaya; 14th suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 654.
10. Kasture H.S, Ayurvediya Panchakarma Vignana: Vamana vignana adhyaya; 8th edition. Kolkata: Shri Baidhyanath Ayurveda Bhavan Ltd; 2004. p.242-76.
11. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Siddisthana; Kalpana siddi adhyaya; 11-12th suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 678.
12. Vagbhata, Shashilekha commentary by Indu. Asthanga Sangraha: Sutrasthana; Dinacharya adhyaya; 39th sutra. Reprint 9th edition. Varanasi: Chaukambha Orientalia; 2005. p. 193.
13. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Kalpasthana; Madanakalpa adhyaya; 5th suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 651.
14. Sushruta, Nibhanda Sangraha commentary by Dalhana, Nyayachandrika by Gayadasa. Sushruta Samhita: Sutrasthana; Doshadhatumala kshaya vriddi vijnaniya

adhyaya; 32nd sutra. Reprint edition. Varanasi: Chaukhambha Krishnadas Academy; 2004. p. 73.

15. Agnivesha, revised by Charaka and Dridhabala, Chakrapanidutta commentary, edited by Yadavaji trikamaji acharya. Charaka Samhitha: Sutrasthana; Matrashitiya adhyaya; 93rd suthra. Reprint edition. Varanasi: Chaukhambha Orientalia; 2015. p. 43.
16. Sushruta, Nibhanda Sangraha commentary by Dalhana, Nyayachandrika by Gayadasa. Sushruta Samhita: Chikitsasthana; Anagatabadha pratishedha adhyaya; 51st

sutra. Reprint edition. Varanasi: Chaukhambha Krishnadas Academy; 2004. p. 73.

Table 1: Clinical data assessed before and after the intervention in GROUP-A

Parameter	BT Mean ± SE	AT Mean ± SE	%	P-value
Chala-spik-udara-sthana	1.86 ±0.19	1.73 ±0.24	7.14	P>0.05
Atikshudha	2.6 ± 0.13	0.66±0.18	74.3	P<0.01
Ati pipasa	1.80 ± 0.10	0.80±0.14	55.5	P<0.01
Nidradhikya	2.06± 0.11	1.0±0.16	51.6	P<0.01
Swedabhada	1.2±0.10	0.86±0.09	27.7	P<0.05
Shrama	1.40±0.13	1.00±0.09	28.5	P<0.01
Weight	71.3±1.63	68.7±1.52	3.59	P<0.01
BMI	28.7±0.57	27.7±0.57	3.4	P<0.01
Chest circumference	38.2±0.65	37.4±0.70	1.9	P<0.05
Abdominal circumference	40.7±0.73	39.5±0.74	3.1	P<0.05
Waist circumference	40.5±0.88	39.5±0.93	2.56	P<0.05

Table 2: Clinical data assessed before and after the intervention in GROUP-B

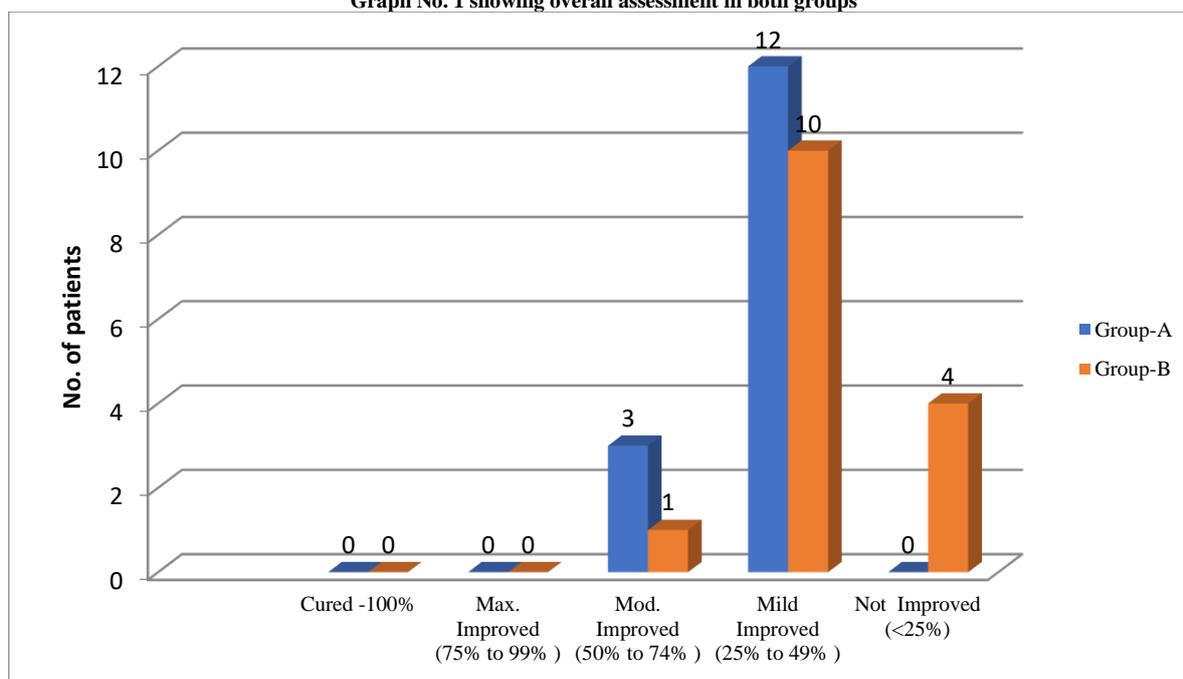| Parameter	BT Mean ± SE	AT Mean ± SE	%	P-value
Chala-spik-udara-sthana	2.13±0.19	1.86±0.25	12.5	P>0.05
Atikshudha	2.33 ± 0.15	2.0 ±0.16	14.2	P<0.05
Ati pipasa	1.33 ± 0.12	1.00±0.13	25	P<0.05
Nidradhikya	1.80 ± 0.10	1.20±0.10	33.3	P<0.01
Swedabhada	1.53 ± 0.16	0.60±0.16	60.8	P<0.01
Shrama	1.26± 0.11	0.53±0.13	57.8	P<0.01
Weight	82.6±3.20	79.5±3.14	3.8	P<0.01
BMI	31.9±0.84	30.8±0.83	3.5	P<0.01
Chest circumference	40.0±0.79	38.7±0.79	3.2	P<0.05
Abdominal circumference	42.7±0.93	40.9±0.89	4.1	P<0.05
Waist circumference	43.4±1.14	41.8±1.07	3.5	P<0.05

Table 3: Lipid Profile values observed before and after the intervention in GROUP-A

Lipid Profile parameter	BT Mean ± SE	AT Mean ± SE	%	P-value
Total Cholesterol	177.6 ±7.62	143.2 ±6.84	19.3	P<0.01
LDL	88.8 ±5.97	77.6 ±3.81	12.5	P<0.01
VLDL	32.4 ±2.0	26.0 ±1.56	19.8	P<0.01
HDL	39.4 ±1.05	41.5 ±0.99	5.41	P>0.05
Triglycerides	162.6 ±9.04	133.7 ±6.87	17.7	P<0.01

Table 4: Lipid Profile values observed before and after the intervention in GROUP-B

Lipid Profile parameter	BT Mean ± SE	AT Mean ± SE	%	P-value
Total Cholesterol	192.9± 11.7	189±7.48	2.0	P>0.05
LDL	116.2± 8.63	111.6±8.34	3.9	P>0.05
VLDL	34.4± 3.07	31.6±3.06	8.1	P<0.01
HDL	39.8± 1.00	36.3±1.13	8.8	P<0.01
Triglycerides	172± 13.7	162.2±10.7	5.6	P<0.05

Table 5: Overall improvement of both groups

Result	Number of pts	
	Group-I	**Group-II**
Cured -100%	0	0
Max. Improved (75% to 99%)	0	0
Mod. Improved (50% to 74%)	3	1
Mild Improved (25% to 49%)	12	10
Not improved (<25%)	0	4

Graph No. 1 showing overall assessment in both groups

Source of support: Nil, Conflict of interest: None Declared