"To study the efficacy of *Ruksha Udwartana* in the management of *Sthoulya* with special reference to obesity"

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ABSTRACT

Obesity has become one of the most serious public health problems of the 21st century with morbid obesity affecting 5% of the country's population. In Ayurveda the signs and symptoms of obesity can be co-related with Sthaulya. In *Samhitas, Sthaulya* is mentioned under '*Santarpan-janya Vyadhi*' and '*Kaphaj Nanatmaj Vikar*'. As *Sthaulya* is not only a cosmetic concern but also has adverse effect on body and may lead to diseases like diabetes, hypertension, hypothyroidism, osteoporosis etc it is need of time to have an effective treatment for it. Panchakarma proves to be very effective in treating Sthaulya, especially the local therapies like Udwartana are very easy and cost effective. Though a proper diet and regular exercise is a key for Obesity, it is necessary to have supportive therapies. As Sthaulya itself is a *Santarpan janya Vyadhi*, with the *Samanya-Vishesh Siddhanta Apatarpan* therapy is strongly recommended in Sthaulya. This paper highlights the role of *Ruksha Udwartana* with *Triphala,Musta* and *Daruharidra Dravyas* in *Sthaulya.*

KEYWORDS: *Sthaulya, Udwartana, Santarpan janya vyadhi, Apatarpan*

INTRODUCTION:

The word Sthaulya is derived from root `sthu` with suffix `ach` which stands probably for thick, bulky, big[1]. A person having heaviness & bulkiness of the body due to excessive growth especially in abdominal region is termed as `Sthoola` & the state of *Sthoola* is called as `*Sthaulya*`[2]. In Ayurveda, Sthaulya (obesity) has been explained and described by Acharya *Charaka* as *'Atisthool Purush'* under the heading of *'Ashtoninditiya Purush'*[3]. He has also introduced *Sthaulya* in '*Santarpan-janya Vyadhi'*[4] and '*Kaphaj Nanatmaj Vikar'* . Sthaulya is the nearest clinical entity for obesity in Ayurveda.*Sthaulya* is *Santarpanjanya*, *Shleshmananatmaj, Medovahastrotodushtijanya,*

Bahudoshadhikya and *Yapya vyadhi* hence *Apatarpan* therapy is prescribed in *Sthaulya*.

According to WHO, obesity can be defined as abnormal or excessive fat accumulation that presents a risk to health.[5] In its simplest terms, obesity can be considered to result from an imbalance between the amount of energy consumed in the diet and amount of energy expended through exercise and bodily functions.

According to *Achahrya Charaka*, *Medovruddhi* is the main cause of *Sthaulya*[6]. In *Sthaulya*, *Vikrut* and *Apachit Medovruddhi* occurs in the body. As accumulation of *meda* in *spik, sthana & udara* are cardinal features of *Sthaulya*, to treat *Sthaulya Udvartan* breaks the *Samprampti* of this disease by *shoshan of kleda*, *Kaphahara* and *Meda Pravilayana* thus reducing *Medavruddhi* in the body. As per *Vagbhata, Udvartan* normalizes *vikrut kapha* & liquefies *apachit meda*. It provides firmness to body, smoothness to skin & improves complexion of skin[7]. Hence, it seems most promising treatment of *Sthaulya* in Ayurveda

The contents of *Udvartan* are *Musta, Daruharidra* and *Triphala*. These are of *Laghu, Ushna* and *Ruksha Guna*.
Drugs used:

Therefore, it will lead to removal of excess Meda present on the body.

MATERIALS AND METHODS:

Udwartana:
Definition : The term *Udvartana* consists of two words *Urdhwa* and *Vartana*. *Urdhwa* means upward *Vartana* means to move. *Udvartana* means to move something in an upward direction. *Udvartana* is a special type of *Abhyanga* in which herbal powders are used for massaging[8] *Acharya Charaka* has mentioned a term called *ShariraParimarjana*.[9]

Benefits of Udwartana:

उद्वर्तनं वातहरं कफमेदोविलापनम् ||७१||
स्थिरीकरणमङ्गानां त्वक्प्रसादकरं परम् |७२|
(su.chi.24/51)

दौर्गन्ध्यं गौरवं तन्द्रां कण्डूं मलमरोचकम्
स्वेदबीभत्सतां हन्ति शरीरपरिमार्जनम्||९३||
(cha.su.5/93)

उद्वर्तनं कफहरम् मेदसः प्रविलायनं ।
स्थिरिकराणांअङ्गानां त्वक्प्रसादनम् परम् ॥
(अ.हृ . 2/14)

Drug	Rasa	Virya	Vipaka	Latin name	guna
Triphala	*Tikta, Katu, Kashaya*	*Sheeta*	*Katu*	*Cyperus rotundus*	*Laghu, Ruksha*
Musta	*Tikta, Katu, Kashaya*	*Sheeta*	*Katu*	*Cyperus rotundus*	*Laghu , Ruksha*
Daruharidra	*Tikta, Kashay*	*Ushna*	*Katu*	*Berberis aristata*	*Laghu , Ruksha*

So the drugs which are for *Udwartana* are mainly *laghu, ruksha, ushna*.
Coarse powder of the above drugs are used.

Methodology:
Sample size- 10

Treatment duration -1 month
Follow up- On 7th, 15th and 30th day.

Method of selection of study subjects:
Inclusion criteria-

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Patient will be selected irrespective of their gender, caste, religion & socioeconomic status.
Patients of age group 18– 50 years will be included.
Patients having BMI more than 25 will be included.
Patients having sign and symptoms of *Sthaulya-*
1. *Daurbaluya*
2. *Kshudrashwas*
3. *Nidradhikya*
4. *Kshudha*
5. *Sweda daurgandhya*

Exclusion criteria-
Patient not willing to give the written consent.
Patients having BMI less than 25.
Pregnant and lactating woman.
Patient of age group below 18 years and above 50 years.
Patient having severe systemic disorders like cardiac, renal disorders, bed ridden due to any chronic illness.
Patient with long term steroidal treatment and taking antipsychotic drugs.

Subjective Criteria

1. *Daurbalya* **(Generalized weakness)**

Grade – 0	Can do routine daily work
Grade – 1	Can do moderate daily work without difficulty
Grade – 2	Can do mild daily work with difficulty
Grade – 3	Cannot do even mild daily work.

2. *Kshudrashwas* **(dyspnea)**

Grade – 0	Absent
Grade – 1	Dyspnea only with moderate exercise
Grade – 2	Dyspnea on slight work
Grade – 3	Dyspnea even at rest

3. *Nidradhikya* **(Excessive Sleep):**

Grade – 0	Normal and sound sleep for 6-8 hrs / 24 hrs With feeling of lightness and relaxation in the body and mind.
Grade – 1	Sleep 8 – 9 hrs/ 24 hrs. With slight heaviness in the body.
Grade – 2	Sleep more than 8 - 9 hrs/ 24 hrs. with heaviness in the body
Grade – 3	Sleep > 10 hrs / 24 hrs. With heaviness in the body associated with Jrimbha and Tandra.

4) *Kshudha* **(Polyphagia)**

Grade – 0	Normal Routine diet.
Grade – 1	Slightly increased (1 meal extra with routine diet)
Grade – 2	Moderately increased (2 meals extra with routine diet)
Grade – 3	Markedly increased (3 meals extra with routine diet)

5) *Sweda Daurgandhya* **(Body Odor) :**

Grade – 0	No odor.
Grade – 1	Bad odor but not offensive.
Grade – 2	Strong odor but can be lessened by use of Deodorants or perfumes.
Grade – 3	Very strong odor even after using fragrances(use of deodorants or perfumes)

B) Objective Criteria:

1) Body Mass Index (BMI) :
A crude population measure of Obesity is BMI i.e. Body Mass Index.
It is measured as:
BMI = Weight in kg / Square of Height in meter[10]

Classification of Obesity as per BMI is as follows:

Normal BMI: 18.5 to 24.9

Overweight: 25 to 29.9

Grade 1 Obesity: 30 – 34.9

Grade 2 Obesity: 35 – 39.9

Grade 3 Obesity: > than 40

Procedure details:

Purvakarma

Patients are thoroughly Examined and confirmed that the patient is fit to undergo *Udvartana* treatment or not. Then preparation for the treatment like material needed are collected. Patient is asked to evacuate bladder and bowel.
Dravya used: *Triphala , Musta* and *Daruharidra.*

Pradhana karma :
It is important that the massage be simultaneously and synchronously done both side of the body to maintain uniformity. *Udvartana* is done in the same chronology of doing *Abhyanga*. It is done covering all the 7 postures.
Position 1- patient sitting on the massage table with lower limbs extended.
Position 2- patients lying on his back (supine)
Position 3-patients lying on one side, turning towards left (left lateral)
Position 4- patients lying on his belly, face downwards (prone)
Position 5- patients lying on other side, turning towards right (right lateral)
Position 6- repeat position 2, patients lying on his back, facing upwards (supine)
Position 7- repeat position 1, patients sitting with legs extended

Durataion of procedure: 35 minutes

Pashchat karma:
After *Udvartana* the body of the patients is cleansed with sterile cloth or tissues or sterile cotton to remove the powder. After wiping off the patient was asked to take rest for about 15 min and then allowed to take bath.

RESULT :
Before and after results of the 10 patients were noted according to the subjective and objective criteria. Paired T test applied to the data for accessing the result.

It is noted as follows:

Sr. no	Parameters	Average (Xd)	Standard deviation	P value	Significance
1	*Daurbalya*	-1.6	0.516398	0.0006282	Significant
2	*Kshudrashwas*	-1.4	0.516398	0.0006282	Significant
3	*Nidradhikya*	-2	0.666667	0.02612	Significant
4	*Kshudha*	-1.7	0.483046	0.0002733	Significant
5	*Sweda daurgadhya*	-1.2	0.421637	0.00006638	Significant
6	BMI	-1.27	0.421769	0.1584	Significant

The difference between the average of after minus before and the μ0 is big enough to be statistically significant. Overall result after clinical and statistical evaluation of 10 patients revealed that *Udwartana* by *Triphala, Musta, Daruharidra* is effective in *Sthoulya* and helps to reduce the signs and symptoms of *sthoulya*. Marked relief in symptoms like *daurbalya, kshudrashwas, nidradhikya, kshudha, sweda daurgandhya* has been noted. Also a good result was noted in BMI. So diseases like *Sthaulya* can be managed effectively by Panchakarma.

DISCUSSION : *Shodhana* therapy helps to eradicate the disease from its root and often gives faster results. *Udawartan* is *rukshan* karma having properties of *kaphahara, meda vilayana , kapha vilayan* etc. As the dravya used are *ushna, tikshna* in its properties, it penetrates into the skin through *romkupa* by action of rubbing and causes *paka* of *kapha* and *meda*. The *dravya* used are *laghu, ruksha* which causes *laghavta* in body and also helps in reduction of symptoms of *sthaulya*. Excellent result was found in *nidradhikya*. As *laghavta* is achieved by *Udwartana* the *utsaha* increases hence *nidradhikya* reduces. It is cost effective and easy to perform hence can be used extensively for obesity. Due to *ruksha* and *kashay guna* it also helps in tightening of loose skin and provides mardavata to the body. It helps to improve texture and skin complexion. As we find many metabolic and lifestyle disorder in todays era , *Udawartan* should be included as a essential daily regime.

CONCLUSION:
Udwartan by Triphala, Musta, Daruharidra is effective in *Sthaulya* w.s.r. to Obesity. Maximum results were achieved in symptoms like *nidradhikya* and *sweda daurgandhya*. Minimum results were achieved in BMI of the patient. This study has limitations as it was done only on a small number of subjects. Further research needs to be done on a larger group of subjects.

REFERENCES :
1. Dr. Ajay Gopalani G., Dr. Bhushan A.Sarmandal,Obesity Chapter 3, Arya Vaidyashala Kottakal, Kerala.p-39.(2013)
2. Dr.Ajay GopalaniG., Dr. BhushanA Sarmandal. Obesity.Chapter 3. Arya VaidyashalaKottakal, Kerala. p-39. .(2013)
3. Author: Bramhananda Tripathi, Charak Samhita, Volume 1, SutraSthan, 21st Adhyaya, 4 th Shlok, page number-399, Edition:reprint 2006, Published by Chaukhamba Surbharati Prakashan, Varanasi.
4. Bramhananda Tripathi,Charak Samhita, Volume 1,SutraSthan, 23rd Adhyaya, 5-7 th, Shlok, page number

6

422, Edition : reprint 2006, Published by Chaukhamba Surbharati Prakashan, Varanasi.

5. Definition of Obesity – According to World Health Organization: www.who.int

6. Bramhananda Tripathi, Charak Samhita, Volume 1, Sutrasthan, 21th Adhyaya, 5th-6th Shlok, page number – 400, Edition : reprint 2006, Published by Chaukhamba Surbharati Prakashan, Varanasi.

7. Ashtang Hridaya, SutraSthan, 2nd Adhyaya, 15th Shlok,page number –

28., Edition : reprint 2014, Published by Chaukhamba Sanskrit Sansthan

8. Udvartan- Ubtan: Benefits, Types, How to do.(Homepage) Easy ayurveda. (Internet) cited at 3 august 2018 at 11:00pm. Available from: https://easyayurveda.com.

9. charak samhita,sutrastrana,chapter5/93

10. Davidson's principles and practice of Medicine, Chapter: Obesity, page no 117, 22nd Edition, Edited by Brian R Walker, Nicki R College, Stuart H. Ralston, Ian D. Penman, published by Churchill Livingstone Elsevier.

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