



Case Study

MANAGEMENT OF *STHOULYA* (OBESITY) WITH *APATARPANA CHIKITSA* – A CASE STUDY

Rohini A. Kathale^{1*}, Sharmili V. Suryavanshi², Prasad V. Kulkarni³

¹P.G. Scholar, ²Professor and HOD, ³Assistant Professor, Dept of Kayachikitsa, Govt. Ayurved College, Nanded, Maharashtra, India.

ABSTRACT

This is the era of modernization, science and technology development; resulted into more sedentary lifestyle. This era is more challenging because of lifestyle disorders which are due to change in dietary habits and mode of lifestyle. Obesity is one of the major lifestyle disorders which are a threat to life and is also a major cosmetic issue. Effective treatment for obesity is a need which is not available in the current scenario. In Ayurveda obesity can be correlated with *Sthoulya* or *Medoroga*. *Acharya Charaka* has prescribed *Apatarpan chikitsa* as the main *Chikitsa* for *Sthoulya*. The present article is about a case of *Sthoulya* treated by *Apatarpan chikitsa* mainly with *Pachana*, *Udwartana*, *Swedana*, *Sadyavamana*, *Rukshana* and *Basti*. Patients got significant relief in all the complaints and a remarkable weight loss in 21 days only.

KEYWORDS: Obesity, *Sthoulya*, *Apatarpan*, *Pachana*, *Udwartana*, *Swedana*, *Sadyavamana*, *Rukshana*, *Basti*.

INTRODUCTION

India saw significant rise in obesity from its 19th position for men and women in 1975 to rankings 5th and 3rd respectively in 2014, reflecting increasing obesity rate among women worldwide^[1]. Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. A person with body mass index (BMI) equal to or more than 25 is considered overweight, and equal to or more than 30 is considered as obese^[2]. Overweight and obesity are major risk factors for a number of chronic diseases, including diabetes, cardiovascular disease and cancer^[2]. In Ayurveda, *Acharya Charaka* has described *Asthounindita Purusha* and out of which he emphasized in detail about two pathological condition Viz. *Atisthoola* and *Atikrusha*^[3]. *Atisthoola purusha* is considered worst among them due to its complicated pathogenesis variable complication and treatment^[4]. The word *Atisthoola* is made up of prefix 'Ati' and 'Sthoola' dhatu. *Ati* means excessive and *Sthoola* means bulky. The meaning of *Atisthoola* is excessively fat^[5]. There is so much increase in fat and muscles that hips, abdomen and breast become pendulous^[6]. *Acharya Charaka* has described *Sthoulya* under *Santarpanotha* diseases^[7]. In

Ayurveda management of any disease is divided into three parts 1. *Nidanparivarjan* 2. *Shodhana* 3. *Shamana*. *Acharya* has mentioned *Guru Cha Atarpana* as a line of treatment for *Sthoulya*^[8]. *Sadyavamana*, *Rukshana*, *Udwartna* and *Basti* are some of the treatment modalities of *Apatarpan* described by *Acharya Charaka* in *Astouninditiya* and *Santarpaniya adhyaya*^[9,10]. These were used here for treating this case of *Sthoulya*. Author evaluated the efficacy of *Apatarpana chikitsa* in management of *Sthoulya*.

MATERIAL AND METHODS

A clinical case study of *Apatarpan Chikitsa* with *Pachana*, *Udwartana*, *Swedana*, *Sadyavamana*, *Rukshana* and *basti* was given to the patient having *Sthoulya*.

CASE STUDY

Primary Data-

Patient name – XYZ

AGE/ SEX - 40 year /female

Address- Nanded

Occupation- Housewife

Table 1: Present complaints with duration

S. NO	Present complaints	Duration
1.	Increased body weight	3 years
2.	Excessive perspiration (<i>Swedabadha</i>)	2 years
3.	Exertional dyspnea (<i>Ayasena swaskasthata</i>)	2 years
4.	heaviness in body (<i>Gurugatrata</i>)	2years
5.	Polydipsia (<i>Atitrushna</i>)	2years
6.	Polyphagia (<i>Atikshuda</i>)	2years
7.	continuous feeling of laziness (<i>Utsahahani</i>)	2years

Past history of illness- No H/O diabetes mellitus, hypertension and bronchial asthma

K/C/O Subclinical Hypothyroidism-Since 6 months

H/O Abortion -15 years back

No H/O any addiction

No H/O any drug allergy

Menstrual history- Regular

Present history—A 40 year female patient apparently healthy before 3 years, Gradually she observed that there was gradual increase in body weight, excessive perspiration (*Swedabadha*), exertional dyspnea (*Ayasena Swaskasthata*), heaviness in body (*Gurugatrata*), Polydipsia (*Atitrushna*), Polyphagia (*Atikshuda*), continuous feeling of laziness (*Utsahahani*). So, she came to OPD of our institute for the Ayurvedic treatment where she was diagnosed with *Sthoulya* (obese class-I per BMI=33.2 kg/m²).

Table 2: Classification of adults for underweight, overweight and obese according to BMI.^[11]

S. No	Classification	BMI
1.	Severely underweight	BMI less than 16.5kg/m ²
2.	Underweight	BMI under 18.5kg/m ²
3.	Normal weight	BMI greater than or equal to 18.5 to 24.9kg/m ²
4.	Overweight	BMI greater than or equal to 25 to 29.9kg/m ²
5.	Obesity	BMI greater than or equal to 30kg/m ²
6.	Obesity class I	BMI 30 to 34.9kg/m ²
7.	Obesity class II	BMI 35 to 39.9kg/m ²
8.	Obesity class III	BMI greater than or equal to 40kg/m ²

History of laboratory investigations

Complete blood count report – Within normal limit

Table 3: Lipid profile report

S. No	Variables assessed	Observed value
1.	Total cholesterol	167mg/dl
2.	Triglycerides	168mg/dl
3.	H.D.L cholesterol	35mg/dl

Table4: Astavidha pareeksha

1.	<i>Nadi</i>	<i>Prakrita</i>
2.	<i>Mala</i>	<i>Prakrita, Niraama mala – 1 or 2/day</i>
3.	<i>Mootra</i>	<i>Prakrita-3-4 veg /day1 or 2 Vega at night</i>
4.	<i>Jivha</i>	<i>Upalipta</i>
5.	<i>Shabda</i>	<i>Prakrita</i>
6.	<i>Sparsh</i>	<i>Anushnasheetha</i>
7.	<i>Drik</i>	<i>Prakrita</i>
8.	<i>Aakruti</i>	<i>Sthoola</i>

Table 5: Anthropometry, personal history, body weight and BMI before starting treatment

B.P.	120/80mm of Hg
Pulse	80bts/min
Height	158cm
Weight	83kg
BMI	33.2kg/m ²
Chest girth	99.5cm
Abdomen girth	90.5cm
Hip girth	105cm
Ahara	Madhur Rasa, Snigdhaahar- Like Milk And Milk Products And Pistanna-Like Rice and Bakery Products
Vihara	Avyayam, Diwaswap, Achinta
Kshudha	Good
Nidra	Sound sleep

Table 6: General physical and systemic examination, no evident changes noted

General condition	Fair
Fever	Afebrile
RS	Air entry B/L equal and clear
CVS	S ₁ S ₂ Normal
CNS	Conscious and oriented to time, place and person
P/A	Soft, fatty

Table 7: Srotas parikshan

Name of Srotas	Dushtilakshana
Rasvaha	Exertional dyspnea (<i>Ayasena swaskasthata</i>) heaviness in body (<i>Gurugatrata</i>), continuous feeling of laziness (<i>Utsahahani</i>)
Mansvaha	enlargement of <i>Spik</i> and <i>Udara</i>
Medovaha	increased body weight Excessive perspiration (<i>Swedabadha</i>) Polydipsia (<i>Atitrushna</i>) Polyphagia (<i>Atikshuda</i>)

Table 8: Nidana Panchaka

Nidana	
• Ahara	Madhur rasa, Snigdhaahar- like milk and milk products and Pistanna-like rice and bakery products (<i>Guru, Snigdha, Sheeta and Abhishyandi</i>)
• Vihara	Avyayam, Diwaswap, Achinta
Poorvaroopa	Avyaktka
Roopa	Weight gain, Excessive sweating, dyspnea on exertion, heaviness in body, continuous feeling of laziness, polydipsia, polyphagia, enlargement of <i>Spik</i> and <i>Udara</i> .
Upashaya	Apatarpan Chikitsa
Anupashaya	Santarpanjanya Ahara

Flow chart 1: Samprapti of Sthoulya



Table 9: Samprapti Ghataka

Dosha	Kapha and Vata
Vikalpasamprapti	Guru, Snigdha, Sheeta and Abhishyandi gunas of Kaphadosha
Dushya	Medo, Mansa, Rasa
Srotasa	Medovaha, Mansavaha, Rasavaha
Srotodustiprakara	Sanga
Rogamarga	Bahya
Vyaktasthana	Sarvashareera

Treatment Plan

1. Pachana
2. Udwartan
3. Swedana
4. Sadyavamana
5. Rukshana
6. Basti

Table 10: Treatment schedule

S.No	Days	Treatment modality	Drugs used	Details
1	DAY 1-6	1. Pachana 2. Udwartana 3. Petisweda	Takrarista No-1 Trifala, Musta, Punarnava and Darvi churna	Takrarista- Dipana and Medohara
2	7 th Day	Kapha Utkleshaka Ahara	At evening Rice with Curd	Abhishyandi and Kapha Utkleshaka
3	8 th DAY	1. Sarvangasnehana 2. Sarvanganadisweda 3. Kaphavardhak Ahara 4. Sadyavamana 5. Dhumapana	1. Dugdhpana- Vachasiddhagodugdha 200ml 2. Vamaka yoga- Madanaphalpippali churna- 5gm, Yastimadhu-5gm, Vacha - 1gm, Pippali-1gm Saindhava- 2gm all Churnas given with honey 3. Aakanthapana - Yastimadhufant-3 liter 4. Lavanodaka 1.5 liter	Sadyavamanavega- • Bruhatavega-5 • Madhyamavega- 4 • Laghuvega-4

			5. <i>Tikshna Dumapana-dhumvarti</i> made up of <i>Vacha</i> , <i>Haridra</i> and <i>Kantakari</i>	
4	DAY 9-11	<i>Sansarjana Krama</i> given for 3 days	Day 1 - Evening - <i>Akrutamudgayush</i> Day 2 - Morning- <i>Akrutamudgayush</i> Evening- <i>Akrutakrushara</i> made with <i>Mudga</i> and Rice Day -3 Morning- <i>Akrutakrushara</i> made with <i>Mudga</i> and Rice Evening- <i>Sakrutakrushara</i> made with <i>Mudga</i> and Rice Day -4 Normal diet	-
5	DAY 12-17	<i>Rukshana</i>	<i>Haritaki churna</i> -3gm+ <i>Kutati churna</i> 2gm with warm water twice a day	Haritaki -Rasa- <i>Pancharasa</i> (<i>Alavana</i>) <i>Vipak</i> - <i>Madhur</i> <i>Virya</i> - <i>Ushna</i> <i>Guna</i> - <i>Laghu, Ruksha</i> Kutaki - Rasa- <i>Tikta</i> <i>Vipaka</i> - <i>Katu</i> <i>Virya</i> - <i>Sheeta</i> <i>Guna</i> - <i>Laghu, Ruksha</i>
6	DAY 18-21	<i>Basti</i> -	1. <i>Erandamooladi niruha basti</i> with <i>Gomutra</i> - 3days 2. <i>Dashamoolasidha taila matra basti</i> -1 day	<i>Niruhabastidravya</i> ^[12] 1. <i>Madhu</i> 2. <i>Saindhava</i> 3. <i>Tiltail</i> 4. <i>Kalka dravya-Shatapuspa</i> and <i>Madanphala</i> 5. <i>Erandmoola kwatha</i> and <i>Gomutra</i> was added. <i>Matrabasti</i> - <i>Dashmoolakwatha</i> and <i>Dashamoolakalka siddha</i> <i>Tiltail</i>

During treatment schedule patient was instructed to follow *Nidanaparivarjana*, *Pathyakara Ahara* and *Pathyakara Vihara*.

RESULTS

There was remarkable reduction in symptoms like *Utsahahani* and *Gurugatrata* after *Sadyavamana* but there was mild reduction in other symptoms, which got significant relief after *Rukshana* and *Basti Chikitsa*. There were significant positive changes in lipid profile and also weight loss of 9kg in 21 days of treatment.

Table 11: Anthropometry changes before and after treatment.

Observation	Before treatment	After treatment
Weight	83kg	74kg
BMI	33.2kg/m ²	29.6kg/m ²
Chest girth	99.5 cm	97.5 cm

Abdomen girth	90.5 cm	86 cm
Hip girth	105 cm	101 cm

Table 12: Changes in lipid profile

Lipid	Before treatment	After treatment
Serum Total cholesterol	167mg/dl	175mg/dl
Serum Triglyceride	168mg/dl (increased)	112mg/dl
HDL	35 mg/dl	56 mg/dl

Table 13: Changes in sign and symptoms

S.No	Signs and symptoms	Before treatment	After Pachana	After Sadyavamana	After Rukshana	After Basti
1.	Exertional dyspnea (<i>Ayasena swaskasthata</i>)	++	++	++	+	+
2.	Excessive perspiration (<i>Swedabadha</i>)	+++	+++	++	+	+
3.	Polydipsia (<i>Atipipasa</i>)	++	++	++	++	+
4.	Polyphagia (<i>Atikshudha</i>)	+++	++	++	++	+
5.	Continuous feeling of laziness (<i>Utsahahani</i>)	+++	++	+	-	-
6.	heaviness in body (<i>Gurugatrata</i>)	+++	++	+	-	-

(++++)- Severe presentation of symptom, (+++) - Moderate presentation of symptom, (++)- Mild presentation of symptom, (+)- least/sometimes presentation of symptom, (-)- no symptoms.

DISCUSSION

Obesity is one of the epidemics, non-communicable disease which causes various life threatening disorders like Diabetes mellitus, hypertension and cardiovascular disorder.

In Ayurveda *Sthoulya* has been described as obesity.

Acharya Charaka explained *Apatarpana Chikitsa* in the *Santarpaniya adhyaya* viz. *Ullekhan, Virechan, Raktamokshan, Vyayam, Upwasa, Dhumpna, Swedana* and mostly *Ruksha annasevana*^[10].

Also, in *Ashtoniditeeya Adhyaya*, *Charaka* explained *Ruksha, Ushna Basti, Ruksha Udwartana, and Takrarishta prayoga*^[9].

Samprapti in this case tells us that *Aaharaja, Viharaja* and *Manasa (Guru, Snigdha, Sheeta and Abhishyandi)* factors are associated with *Kapha Dosha Vriddhi* which ultimately resulted in *Srotorodha* and *Medo Dhatwagni Mandya* and thereby into excessive increase in *Meda dhatu*. When there is *Dhatwagni Mandya* it causes quantitative increase in respective *Dhatu*^[13]. All the *Srotas* get *Avarodha*, by increased *Meda* and due to *Avarodha*, *vata* gets confined to *kosta* and causes *Jatharagnivridhi*^[14]. As *Sthoulya* is considered as *Santarpanjanya vikara*, *Apatarpana* becomes its special regimen. Considering the *Hetus* of

patient which leads to *Kapha Dosha* predominance and *Vata Prakopa* by *Avrodhajanya Samprapti* following treatment protocol was given.

1. *Pachana*- As *Doshas* were in *Sama Avastha* *Pachana* was given for 6 days with *Takrarishta*.
2. *Udwartana*- As it reduces *Kapha Dosha* and melts excess of fat^[15].
3. *Swedana*- *Swedana (Petisweda)* was given for 7 days. As patient was reluctant to take *Snehapana*, so to avoid *Snehavyapada*, *Sadyavamana* was given.
4. *Kapha Utkleshaka Ahara*- Rice with curd was given on evening of day before *Sadyavamana*
5. *Sadyavamana*- *Sadyavamana* was given to expel excessively increased *Kapha dosha*.
6. *Dhumapan- Tikshna Dhumapana* was given with *Dhumvarti* made of *Vacha, Haridra* and *Kantakari* to remove the sticky *Kapha* in throat.
7. *Sansarjankram*- After *Shodhana* procedure there is occurrence of *Jatharagnimandya*, so to stimulate and maintain *Jatharagni*, *Sansarjankram* was advised, patient had *Madhyamshuddhi* so *Sansarjankram* was given for three days^[16].

8. Rukshana- Rukshana was given as Shamanachikitsa for remaining vitiated Doshas with Haritaki and Kutaki churna.
9. Basti- Vataprakopa was due to Margavarodha due to Meda dhatu vriddhi, so Ruksha and Ushna dravyas were used for Basti.

CONCLUSION

Sthoulya can be successfully managed with Ayurvedic *Apatrapan chikitsa*. In present case study, combined use of *Nidanaparivarjana*, *Shodhana*, *Rukshana* and *Basti chikitsa* as per *Dosha Avastha* gave remarkable relief to the patient with significant weight reduction. To prevent relapse, patient was advised to follow *Pathyakar Ahara* and *Vihara*.

REFERENCES

1. Mahesh Raju B Et Al:Management Of Obesity (Sthoulya) A Success Story-A Case Study. International Ayurvedic Medical Journal {online} 2017 {cited April, 2017} Available from: http://www.iamj.in/posts/images/upload/1335_1344.pdf
2. <https://www.who.int/topics/obesity>.Source (Internet).
3. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/3-4, Varanasi, Chowkhmbha surbharati prakashana; 2013.116.
4. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/17, Varanasi, Chowkhmbha surbharati prakashana; 2013.117.
5. Ahuja suman-role of different food articles in the management of Medoroga (sthoulya) or obesity. International Ayurvedic Medical Journal August - 2018,6(8)1836-41.

6. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/9, Varanasi, Chowkhmbha surbharati prakashana; 2013.117.
7. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/4, Varanasi, Chowkhmbha surbharati prakashana; 2013.122.
8. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/20, Varanasi, Chowkhmbha surbharati prakashana; 2013.117.
9. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/21, Varanasi, Chowkhmbha surbharati prakashana; 2013.117.
10. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 23/8, Varanasi, Chowkhmbha surbharati prakashana; 2013.122.
11. www.ncbi.nlm.gov Connor B. Weir; Arif Jan-BMI. Classification percentile & cut off points.
12. Kaviraj Dr Ambikadatta shastri, Sustrut Samhita,, Chikitsastana 38/100,Varanasi, Chowkhmbha surbharati prakashana;2016.216.
13. Garde Ganesha, Sartha Vagbhata, Sutrastana 11/34, Varanasi, Chowkhmbha surbharati prakashana;2011.54.
14. Yadavaji Trikamaji. Charaka Samhita, Sutrastana 21/5, Varanasi, Chowkhmbha surbharati prakashana; 2013.116.
15. Garde Ganesha, Sartha Vagbhata, Sutrastana2/14, Varanasi, Chowkhmbha surbharati prakashana; 2011.08.
16. Yadavaji Trikamaji. Charaka Samhita, Siddhithana 1/13,Varanasi, Chowkhmbha surbharati prakashana; 2013.679.

Cite this article as:

Rohini A. Kathale, Sharmili V. Suryavanshi, Prasad V.Kulkarni. Management of Sthoulya (Obesity) With Apatarpana Chikitsa- A Case Study. International Journal of Ayurveda and Pharma Research. 2020;8(8):58-64.

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

*Address for correspondence

Dr. Rohini A. Kathale

PG Scholar,

Dept. of Kayachikitsa,

Govt. Ayurved College,

Nanded, Maharashtra, India.

Email:

drrohiniathale.2017@gmail.com

Contact no- 7972006769

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.