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

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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 Santarpanothe 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 Apatrpan 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 (Swedabadha) | 2 years  |
| 3.    | Exertional dyspnea (Ayasena swaskasthata) | 2 years  |
| 4.    | heaviness in body (Gurugatrata)    | 2 years  |
| 5.    | Polydipsia (Atitrushna)            | 2 years  |
| 6.    | Polyphagia (Atikshuda)             | 2 years  |
| 7.    | continuous feeling of laziness (Utsahahani) | 2 years  |

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/m²  |
| 2.    | Underweight          | BMI under 18.5kg/m²      |
| 3.    | Normal weight        | BMI greater than or equal to 18.5 to 24.9kg/m² |
| 4.    | Overweight           | BMI greater than or equal to 25 to 29.9kg/m² |
| 5.    | Obesity              | BMI greater than or equal to 30kg/m² |
| 6.    | Obesity class I      | BMI 30 to 34.9kg/m²      |
| 7.    | Obesity class II     | BMI 35 to 39.9kg/m²      |
| 8.    | Obesity class III    | BMI greater than or equal to 40kg/m² |

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        |

Table 4: Astavidha pareeksha

| 1.    | Nadi | Prakrita                  |
| 2.    | Mala | Prakrita, Niraama mala – 1 or 2/day  |
| 3.    | Mootra | Prakrita-3-4 veg/day1 or 2 Vega at night |
| 4.    | Jivha | Upalipta                  |
| 5.    | Shabda | Prakrita                  |
| 6.    | Sparsh | Anushnasheetha            |
| 7.    | Drik  | Prakrita                  |
| 8.    | Aakruti | Sthoola               |
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/m²     |
| 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                | S₁ S₂ 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 (Ayasena swaskasthata) heaviness in body (Gurugatrata), continuous feeling of laziness (Utsahahani) |
| Mansvaha       | enlargement of Spik and Udara |
| Medovaha       | increased body weight Excessive perspiration (Swedabadha) Polydipsia (Atitrushna) Polyphagia (Atikshuda) |

Table 8: Nidana Panchaka

| Nidana   | Ahara                                                                 |
|----------|----------------------------------------------------------------------|
|          | Madhur rasa, Snigdhaahar- like milk and milk products and Pistanna-like rice and bakery products (Guru, Snigdha, Sheeta and Abhishyandi) |
|          | 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 Spik and Udara. |

| Upashaya   | Apatarpan Chiktsa |
|------------|-------------------|
| Anupashaya | Santarpanjanya Ahara |
Flow chart 1: Samprapti of Sthoulya

Nidana Sevana
(Madhura Rasa, Snigdha Ahara, Pistanna sevana, Diwaswap, Avyayama, Achinta)

Kaphadoshavridhhi

Medodhatwagnimandya

Medo dhatu vridhhi

Sthulata

Table 9: Samprapti Ghataka

| Dosha               | Kapha and Vata                          |
|---------------------|----------------------------------------|
| Vikalpasamprapti    | Guru, Snigdha, Sheeta and Abhishyandi gunas of Kaphadosha |
| Dushya              | Medo, Mansa, Rasa                       |
| Srotasana           | 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                             | Takrarista No-1                                                           | Takrarista- Dipana and Medohara|
|      |           | 2. Udwartana                           | Trifala, Musta, Punarnava and Darvi churna                                  |                                |
|      |           | 3. Petisweda                           |                                                                            |                                |
| 2    | 7th Day   | Kapha Utkleshaka Ahara                 | At evening Rice with Curd                                                  | Abhishyandi and Kapha Utkleshaka|
| 3    | 8th DAY   | 1. Sarvangasnehana                     | 1. Dugdhpama-Vachasiddhagodugdha 200ml                                   | Sadyavamanavega-                |
|      |           | 2. Sarvanganadise  da                  | 2. Yamaka yoga-Madanaphalippalli churna-5gm,                               | • Bruhatavega-5                  |
|      |           | 3. Kaphavardhak Ahara                 | Yastimadhu-5gm, Vacha-1gm, Pippali-1gm Saindhava-2gm all Churnas given with | • Madhyamavega-4                 |
|      |           | 4. Sadyavamana                         | honey                                                                      | • Laghuvega-4                   |
|      |           | 5. Dhumapana                           | 3. Aakanthapana - Yastimadhfuant-3 liter                                   |                                |
|      |           |                                        | 4. Lavanodaka 1.5 liter                                                    |                                |
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/m²        | 29.6kg/m²       |
| 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 (Ayasena swaskasthata)               | ++              | ++           | ++               | +             | +          |
| 2.   | Excessive perspiration (Swedabadha)                    | +++             | +++          | ++               | +             | +          |
| 3.   | Polydipsia (Atihipasa)                                 | ++              | ++           | ++               | ++            | +          |
| 4.   | Polyphagia (Atikshudha)                                | +++             | ++           | ++               | ++            | +          |
| 5.   | Continuous feeling of laziness (Utsahahani)             | +++             | ++           | +                | -             | -          |
| 6.   | heaviness in body (Gurugatrata)                        | +++             | ++           | +                | -             | -          |

(++++)- 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 Apatrapana Chikitsa in the Santarpaniya adhyaya viz. Ullekhana, Virechan, Raktamokshan, Vyayam, Upwasa, Dhumpana, 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 Abhishyandy) factors are associated with Kapha Dosha Vriddh 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 Jatharagnirviddhi[14]. As Sthoulya is considered as Santarpanjanya vikara, Apatrapana 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. Udawrtana- 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- Tiksha Dhumapan 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- Vataprapakopa** was due to Meda dhatu vriddhi due to *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.

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