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Excellence in Action: Multidisciplinary Ayurvedic management of *Sthoulya* (Obesity) and *Sandhigata Vata* (Osteoarthritis): Integrating *Shamana Aushadhi*, *Shodhana*, Diet, Physiotherapy, and *Mansika Upchara* – A Case Report.

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Abstract

Sthoulya and its complication – *Sandhigatavata* are multifactorial disorders requiring a comprehensive management strategy. This case study demonstrates a multidisciplinary - *Ayurvedic* approach combining *Shamana Aushadhi, Shodhana, Pathya Ahara*, physiotherapy, *Mansika Upchara* to address both - metabolic and musculoskeletal aspects of disease. A 56-year-old male with Class II Obesity (BMI 37.0kg/ m^2) and chronic knee pain presented with symptoms of *Medovaha Strotodushti*. The management protocol included: ***Shamana Aushadhi*****:** *Varunadi Kashaya*, *Arogyavardhini Vati*, and *Medohar Guggulu* to correct metabolism. ***Shodhana*****:** *Sarvanga Udwartana* with *Yava* and *Vacha Churna* and *Lekhana Basti* targeting metabolic correction. ***Ahara*****:** A specialized *Pathya-Apathya* regimen was enforced to ignite *Agni*. **Physiotherapy:** Targeted knee joint and lower back exercises were prescribed to improve mobility. ***Mansika Upchara*****:** Counseling was performed to alleviate anxiety regarding the procedures, resulting in a reported state of mental clarity and happiness post-therapy. The multimodal approach yielded significant improvements: In **just 11 days,** weight decreased from **107 kg to 104 kg**, waist circumference **125 cm to 121 cm**. The patient reported **90%** relief in lower backache and knee pain. Functionally, dyspnoea on exertion, pedal oedema was reduced and patient achieved sound sleep pattern indicating improved mental and physical comfort. This strategic integrated protocol of *Samhitokt*

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Shodhana with pharmacotherapy, rehabilitation, and psychological support successfully eradicated the root pathology of *Medovaha Strotodushti* and offered a holistic model for managing lifestyle disorders like *Sthoulya*.

Key words : *Aarogyavardhini Vati, Lekhana Basti, Medohara Guggulu, Multidisciplinary Ayurvedic* Management, *Sandhigatavata, Sthoulya, Udwartana*.

***S**thoulya* (obesity) is described in Ayurveda as a *Santarpanottha Vyadhi*[8] arising due to excessive fat accumulation that represents a health risk, improper dietary habits, sedentary lifestyle and psychological factors leading to *Meda Dhatu Vriddhi*[6] and *MedovahaStrotodushti*. Classical texts including Charaka Samhita emphasize that *Sthoulya* is not merely an increase in body weight but a pathological state involving deranged Agni, impaired *Dhatu Parinama*and obstruction of bodily channels resulting in fat deposition over buttocks, belly and breasts and gives pendulous appearance[2]. In the contemporary era, obesity has emerged as a major global health concern and is strongly associated with lifestyle disorders such as diabetes mellitus, hypertension, dyslipidemia, anxiety and degenerative joint diseases. According to Aacharya Charaka, *Sthoulya* is included in 'Ashto - Nindit Purusha[7].

Sandhigata Vata, a *Vata* predominant disorder affecting joints, closely resembles osteoarthritis in modern medicine[5]. It commonly manifests with *Sandhi Shoola, Sandhi Shotha*, stiffness, crepitus, and restricted movements. In obese individuals, excessive body weight accelerates joint degeneration, particularly in weight-bearing joints such as the knee. From an Ayurvedic perspective, the association of *Sthoulya* with *Sandhigata Vata* can be understood as *Avarana* of *Vata* by *Meda*, leading to chronic joint pathology.

Pathophysiological link between Medovriddhi and Sandhigata Vata :

Excess *Medadhatu* leads to *Strotorodha* particularly in *Medovaha* and *Rasavahastrotas* resulting in impaired tissue metabolism. This causes *Avarana* of Vata leading to its *Prakopa*. In *Sandhigata Vata* the obstructed *Vata* localizes in the joints and produces pain, swelling, stiffness and restricted movement. Thus, *Meda* induced obstruction plays an important role in the development and persistence of *Sandhigata Vata*.

Modern management of obesity and osteoarthritis often focuses on symptomatic relief, pharmacological pain control, or surgical interventions, which may not address the root cause and often carry long-term adverse effects[11]. Ayurveda offers a holistic, multidimensional approach emphasizing *Shodhana* (biopurification), *Shamana* (pacifying therapies), *Ahara* (dietary regulation), *Vihara* (lifestyle modification), and *MansikUpchar* (psychological support). This case report highlights the effectiveness of a multidisciplinary Ayurvedic management protocol integrating classical therapeutic principles with physiotherapy and counseling in a patient suffering from *Sthoulya* complicated by *Sandhigata Vata*.

Aims and Objectives :

The primary aim of this case study was to evaluate the efficacy of a comprehensive, multidisciplinary Ayurvedic treatment approach in the management of *Sthoulya* associated with *Sandhigata Vata*.

The specific objectives were:

1. To assess the role of *Shamana Aushadhi* in correcting Agni, reducing *Meda Dhatu*, and alleviating musculoskeletal symptoms.
2. To evaluate the impact of *Shodhana* therapy, particularly *Udwartana* and *LekhanaBasti*, in managing *Medovaha Strotodushti*.
3. To study the effect of a structured *pathya ahara* regimen on weight reduction and metabolic correction.
4. To assess the supportive role of physio-therapy in improving joint mobility and reducing pain.
5. To observe the contribution of *Mansik Upchar* in improving treatment compliance and overall well-being.

Study Design :

This study is a single-case observational clinical study conducted in the Kayachikitsa department of Parul Institute of Ayurvedic and Research, Vadodara.

Patient Information :

A 56-year-old male patient presented with complaints of excessive weight gain, bilateral knee joint pain, lower backache, difficulty in walking, dyspnoea on exertion, disturbed sleep, and easy fatigability. The condition was chronic in nature and gradually progressive.

Clinical Findings :

On examination, the patient had features suggestive of *Sthoulya* such as increased body weight, pendulous abdomen, reduced physical stamina, and *Medovaha Strotodushti Lakshanas*. The knee joints showed pain on movement, mild swelling, crepitus, and restricted range of motion suggestive of *Sandhigata Vata*. Vital parameters were within normal limits.

Diagnostic Criteria :

The diagnosis was made based on Ayurvedic parameters including *Nidana, Lakshana*, and *Samprapti*, along with modern assessment tools such as Body Mass Index (BMI). The patient was categorized under Class II[13] Obesity with a BMI of 37.0 kg/m².

Treatment Protocol

Shamana Aushadhi :

- ***Varunadi Kashaya***– To correct Meda metabolism and relieve obstruction of channels.
- ***Aarogyavardhini Vati*** – To enhance Agni, support liver function, and aid metabolic correction.
- ***Medohar Guggulu*** – For its Lekhana and Medohara properties.

1. ***Varunadi Kashaya :*** The *Tikta–Katu rasa* and *Ruksha–Laghu guna* of *Varunadi Kashaya* exert a *Medohara* and Lekhana effect, facilitating the reduction of excessive and pathological *Meda Dhatu*. These properties are particularly effective in reducing *Abaddha Meda*, which is responsible for dyslipidemic states.

Agni Deepana and Ama Pachana :

Constituent drugs such as *Chitraka, Shunti,* and *Shigru* exhibit potent Deepana and Pachana actions. Elimination of *Ama* is crucial, as *Ama* acts as a primary obstructive factor within strotas and contributes to metabolic dysregulation in *Medavr%ddhi*.

Strotoshodhana :

The *Ushna virya* and *Teekshna guna* of *Varunadi Kashaya* facilitate *Srotoshodhana* by dissolving *Kapha–Meda–Ama* complexes responsible for *Strotorodha*.

Role of Varuna as the Principal Drug :

Varuna (Crataeva*nurvala*) is the chief constituent and exhibits *Bhedana, Lekhana,* and *Kapha-Medavilayana* properties. Classical texts describe *Varuna* as effective in *Granthi, Shotha*, and *Medaja vikara*, conditions commonly associated with *Strotorodha*. Its deep-penetrating action aids in disintegration of obstructive pathology and restoration of strotas integrity.

Samprapti Bhanga (Interruption of Disease Process) :

Varunadi Kashaya acts at multiple levels of the disease process :

1. *Deepana–Pachana* eliminates *Aama*
2. *Medohara–Lekhana*[1] reduces excessive *Medadhatu*
3. *Strotoshodhana*
4. *Agni prasadana*

Overall in this case it helped in managing *Kapha–Meda vr̥ iddhi*, *Agnimandya, aama* and *srotorodha*. Its *Medohara, Lekhana, Deepana,* and *Srotoshodhana* properties collectively contributed to metabolic correction and sustainable clinical improvement, validating its classical indication in *Sthoulya*.

2. ***Aarogyavardhini Vati :*** The formulation predominantly possesses *Tikta* and *Katu* rasa, *Laghu, Ruksha and Teekshnaguna, Ushnavirya* and *Katuvipaka* which together exert *Kapha-Medohara, Deepana, Pachana and Stroto-shodhana* actions.[4]

Role in management of Medovriddhi and obesity :

The *Tikta* and *Katu* rasa along with *Ruksha guna* produce *Medohara* and *Lekhana* effects leading to reduction of excessive *Meda Dhatu*. *Triphala Guggulu* and *Shilajatu* help in reducing *Abaddha Meda* and improving lipid metabolism. The formulation enhances *Medodhatvagni* thereby preventing further pathological accumulation of *Meda*.

Strotoshodhana :

Aarogyavardhini Vati clears *Meda* and *Ama* induced obstruction in *Medovaha* and *Rasavaha*strotas. This restores normal circulation nutrient transport and metabolic balance.

Role in management of Sandhigata Vata :

Aarogyavardhini Vati removes Medaavarana of *Vata* thus restoring normal *Vata-gati*. Guggulu and *Triphala* contribute to *Vatanulomana* and reduce stiffness, pain, and restricted joint movements.

Shothahara and anti-inflammatory action:

Guggulu, Nimba and Kutaki possess *Shothahara* and *Vedana-sthapana* properties which help in reducing joint inflammation, swelling and pain in *Sandhigata Vata*.

Overall, in this case *Aarogyavardhini Vati* helped in gradual weight reduction, reduction in joint pain, stiffness and swelling and showed improvement in functional mobility. *Aarogyavardhini Vati* proved as an effective formulation in the management of Medovriddhi associated with *Sandhigata Vata*. It corrected *Agni*, reduced *Meda*, removed *Strotorodha* and normalized *Vata* and thereby addressed both metabolic and musculoskeletal aspects of the disease.

3. ***Medohar Guggulu:*** *Medohar Guggulu* possesses *Tikta and Katu rasa Laghu, Ruksha Teekshna guna, Ushna virya* and *Katu vipaka* which are antagonistic *to Kapha* and *Meda.*[3] These properties facilitate Medohara and Lekhana actions leading to reduction of excessive and pathological *Meda Dhatu* especially *Abaddha Meda* responsible for obesity and dyslipidemia.

Dhatvagni Vardhana :

The presence of Guggulu as the principal drug plays a vital role in lipid metabolism regulation. Guggulu enhances Medodhatvagni and promotes proper utilization of nutrients thus preventing further accumulation of *Meda Dhatu*. Its *Lekhana* and *Shothahara* properties help in breaking *Meda* induced obstruction in *Medovaha a*nd *Rasavahasrotas*.

Agnideepana and Amapachana :

Medohar Guggulu also exhibits potent *Deepana* and *Pachana* actions. It stimulates *Jatharagni* and *Dhatvagni* leading to digestion and elimination of ama. Removal of ama is essential as ama acts as a major factor causing *Strotorodha* and metabolic imbalance in Medovriddhi.

Srotoshodhana :

By clearing *Meda* and *Ama* induced obstruction Medohar Guggulu restores normal strotas patency. This improves circulation, nutrient transport and tissue metabolism resulting in gradual and sustained weight reduction. Medohar Guggulu also helps in normalizing Vatagati by removing Meda *Avarana* of *Vata*. This prevents further metabolic derangement and supports overall energy balance and physical activity tolerance.

Overall, in this case Medohar Guggulu managed *Sthoulya* by correcting Agnimandya, reducing pathological *Meda Dhatu*, eliminating *ama*, clearing *Strotorodha* and restoring metabolic equilibrium and thereby offered a holistic and sustainable therapeutic approach. Medohar Guggulu contributed to reduction in body weight, body mass index, waist circumference and heaviness of the body. It improved digestion, regulated appetite and physical stamina without producing excessive depletion or weakness.

These medicines were administered orally in appropriate doses for the prescribed duration.

Shodhana Chikitsa :

- ***Sarvanga Udwartana*** with *Yava* and

Vacha Churna was performed to induce *Rukshana*, reduce *Kapha-Meda*, and improve peripheral circulation.

- ***Lekhana Basti*** was administered as per classical guidelines to address systemic *Meda* accumulation and *Vata Avarana*.

1. Sarvanga Udwartana :

Udwartana involves frictional massage in an upward direction using dry and rough powders.[9] The Ruksha Laghu and *Teekshna* qualities of Yava churna and Vacha churna counteract the Snigdha and Guru qualities of *Kapha* and *Meda* and help in reducing excessive *Meda Dhatu*.

Scraping of excess sub-cutaneous fat :

Yava churna possesses *Kashaya, Madhura rasa, Laghu* and *Ruksha guna*, *Sheeta virya* and *Katu vipaka*. It exhibits *Medohara* and *Lekhana* actions and is classically indicated in *Sthoulya* and *Prameha*. The abrasive nature of Yava churna helps in scraping excess subcutaneous fat and improves firmness of the body tissues.

Strotoshodhana :

Vacha churna possesses *Katu, Tikta rasa, Laghu, Ruksha* and *Teekshna guna, Ushna virya* and *Katu vipaka*. It has strong *Kaphahara, Medohara, Deepana and Strotoshodhaka* actions. Vacha helps in breaking *Kapha-Meda* granthi and clearing obstruction in Medovaha and *Svedavaha* strotas.

Shakha to Koshta Gati of prakopit dosha :

Sarvanga Udwartana improves peripheral circulation and enhances lymphatic drainage. This facilitates mobilization of accumulated *Meda* and reduces localized fat deposition. The mechanical pressure and friction generate mild heat which helps in liquefying *Kapha* and *Meda* and promotes their movement towards the *koshta* for elimination.

Stimulation of Svedavaha Strotas :

Udwartana also stimulates *Svedavaha strotas* and induces proper perspiration. Improved sweating helps in reducing excessive body heaviness and stiffness and supports detoxification through the skin.

Overall, in this case *Sarvanga Udwartana* with Yava churna and Vacha churna proved to be an effective external therapeutic modality in *Sthoulya*. It exerted *Medohara, Lekhana, Kaphahara* and *Strotoshodhana* actions and complemented to internal therapies by correcting peripheral metabolic dysfunction and facilitating sustainable weight management.

Lekhana Basti[12] *: Basti* is the prime therapy for regulation of Vata dosha and in *Sthoulya- Vata* is often obstructed by excessive *Meda* leading to *Medavarita Vata. Lekhana Basti* removes this *avarana* and restores normal *Vatagati* which is essential for correction of metabolism and mobilization of accumulated *Meda Dhatu*.

Honey in the formulation possesses Ruksha Laghu and Lekhana properties and acts as *Yogavahi*. It helps in scraping excess *Meda Dhatu* and facilitates deeper penetration

of other drugs into the strotas.

Saindhava lavana has Sukshma and *Strotoshodhaka* properties. It helps in breaking *strotorodha* and enhances absorption of the *Basti dravya* while maintaining electrolyte balance.

Tila taila acts as a carrier and balances Vata without aggravating Kapha when used in controlled quantity. It facilitates smooth administration of Basti and helps in mobilization of morbid doshas from peripheral tissues towards the *koshta*.

Shatapushpa churna possesses *Deepana, Pachana* and *Vatanulomana* properties. It stimulates *Jatharagni* and *Medodhatvagni* and helps in digestion of *ama* and regulation of lipid metabolism.

Yavakshara has strong *Lekhana, Bhedana and Kapha-Meda hara actions*. It breaks down accumulated *Medadhatu* and clears obstruction in *Medovahasrotas*. It's *Kshara* property enhances metabolic activity and supports reduction of excessive adiposity.

Gomutraarka possesses *Ushna, Teekshna* and *Lekhana* properties. It acts as *Agni deepaka, Medohara*and *Strotoshodhaka* and helps in dissolving *Kapha-Meda* complexes and eliminating ama.

Triphala has *Anulomana, Lekhana, Rasayana* and *Medohara* properties. It helps in proper elimination of morbid doshas, regulates bowel function and prevents further accumulation of *Medadhatu*.

Overall, in this case *Lekhana Basti* helped in reduction of body weight, body circumference, heaviness, and lethargy. It improved digestion, metabolism, and physical activity tolerance in patients of *Sthoulya*. *Lekhana Basti* with the given formulation proved as an effective therapeutic modality in *Sthoulya*. It acted at the root level by correcting *Medavarita Vata* reducing pathological *Meda Dhatu*, cleared *Strotorodha* and helped restore metabolic balance thereby providing sustainable and holistic management of *Sthoulya*.

Ahara Chikitsa :

A strict Pathya Ahara regimen was advised. Heavy, oily, and calorie-dense foods were avoided. The patient was encouraged to consume *Laghu, Ruksha*, and *Agnivardhaka* foods, with *Mudga Yusha* as a staple meal. Meal timings and portion control were emphasized.

1. ***MudgaYusha :*** *Mudga Yusha* helps in managing *Sthoulya* by its *Laghu* and *Ruksha* properties which reduce *Kapha* and *Meda*. It supports Agni without forming ama. Its Kashaya *rasa* produces *Lekhana* and *Medohara* effects. It provides light nutrition promotes body lightness and prevents further fat accumulation.

Physiotherapy :

Targeted exercises for the knee joint and lower back were prescribed to improve muscle strength, joint stability, and mobility. The exercises were gradually progressed according to patient tolerance.

Exercises/ Physiotherapy included-

1. Static back exercise - 10 repetitions of 10 seconds each.

2. Bridging -7-10 repetitions of 5 seconds each.
3. Knee Bends (lying) – 7-10 repetitions.
4. Hamstring Curls – 10 repetitions.

Mansik Upchar :

Regular counseling sessions were conducted to address anxiety related to obesity, joint pain, and Panchakarma procedures. Motivation and re-assurance were provided to improve adherence to treatment and lifestyle modifications.

Observations and Results

The patient was assessed before and after completion of the treatment protocol using subjective and objective parameters.

Objective Parameters :

- Body weight reduced from 107 kg to 104 kg.
- Waist circumference reduced from 125 cm to 121 cm.
- BMI showed a noticeable downward trend.

Subjective Parameters :

- Knee joint pain and lower backache reduced by approximately 90%.
- Improvement in walking capacity and ease of movements was reported.
- Dyspnea on exertion and pedal oedema were markedly reduced.
- Sleep quality improved significantly, with the patient reporting sound and refreshing sleep.

Table-1.

Sr. No	Lakshanas[10]	Before Treatment	After treatment
1.	Chala sphik stana udara	Little visible movements even after moderate movement.	Little visible movements after fast movements.
2.	Dourbalya	Tired after doing strenuous physical activity.	Feeling of well being.
3.	Kshudra Shwasa	Moderate dyspnoea after physical exertion.	Mild dyspnoea after physical exertion
4.	Pipasa atiyoga	Drinks about 10-15glass of water	Drinks about 10-15glass of water
5.	Kshuddha aadhikya	Becomes hungry after 4-5 hrs	Becomes hungry after 4-5 hrs.
6.	Sweda aadhikya	Normal Perspiration	Normal Perspiration
7.	Atinidra	8-10 hrs or day sleep	6-8 hrs sleep
8.	Gauravta	Continuos feeling of heaviness, but patient does usual work.	Occasional feeling of heaviness.
9.	Aalasya	Doesn't have desire, works under compulsion.	Continuos feeling of heaviness, but patient does usual work.

Mental and Functional Status :

The patient exhibited improved mental clarity, reduced anxiety, and a positive outlook towards health.

It was found out that patient felt relaxed and most of his symptoms decreased in just 11 days of shamana aushadhi and just 9 days of this multidisciplinary approach to treat *Sthoulya* with *Sandhigata Vata* without any allopathic approach.

Sthoulya is primarily a disorder of *Meda Dhatu* characterized by impaired Agni and excessive accumulation of Kapha and Meda. The presence of *Sandhigata Vata* in this patient reflects a chronic disease process where Vata becomes obstructed by Meda, leading to degenerative joint changes. Therefore, the treatment strategy focused on removing Avarana, correcting Agni, and restoring normal Vata function.

Udwartana played a crucial role by inducing Rukshana and reducing *Kapha-Meda* dominance. Lekhana Basti is considered one of the most effective therapies for systemic metabolic disorders and *VataAvarana*, acting at the level of *Pakwashaya*. Shamana Aushadhi supported internal metabolic correction and ensured sustained results.

Dietary regulation is central to the management of *Sthoulya*. The inclusion of Mudga Yusha and avoidance of Guru-Ahara helped in *Agni Deepana* and *Meda Kshaya*. Physiotherapy complemented Ayurvedic treatment by improving joint mechanics and preventing further degeneration. Mansik Upchar enhanced patient confidence, reduced stress, and ensured long-term adherence.

The integrated approach demonstrated that addressing both physical and psychological components yields superior outcomes in lifestyle disorders.

This case report demonstrates that a multidisciplinary Ayurvedic approach integrating Shamana Aushadhi, Shodhana Chikitsa, Pathya Ahara, physiotherapy, and Mansik Upchar can effectively manage *Sthoulya* complicated by *Sandhigata Vata*. The holistic protocol not only reduced body weight and joint pain but also improved functional capacity, mental well-being, and quality of life. Such integrative models can be safely adopted in the management of chronic lifestyle disorders and hold significant potential for wider clinical application and research.

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this case report.

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