Understanding the Nidana Panchaka of Sthoulya induced Fibroid Uterus (Garbhashaya Granthi) through its Ayurvedic management

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ABSTRACT

Sthoulya (obesity) is one among the non-communicable disease which is a threat for human health. The overweight population have been doubled in a few decades in urbanised societies as a result of changes occurring in Food Habits, Lifestyle and Occupational patterns, and these have significant health implications as they produce Santarpanotha Vikaras. In Ayurveda metabolic disorders can be correlated with the Santarpanotha Vikaras. Sthoulya is enumerated under Santarpanotha Vyadhi. Dustha Kapha and Medo Dhatu when they take Sthanassamshraya in Garbhashaya Mamsa Dhatu and results in the manifestation of Granthi, Arbuda, which are enumerated under Santarpanotha Vyadhi. In the Nidanaarthakara Roga, the Ubhayarthakara Roga is explained which refers to the manifestation of secondary disease with persistence of primary disease. Here in this Vyadhi Sthoulya acts as a Ubhayarthakara Roga for Garbhashaya Granthi. In the literatures of Ayurveda, research articles, Allopathic books, Modern research articles we have found a link between Kapha Doshha, Meda Dhatu, Sthoulya (Obesity) having relation with manifestation of Fibroid Uterus (Garbhashaya Granthi). To come out with line of treatment, as direct line of treatment is not explored hence, we want to explore the line of treatment for Sthoulya (Obesity) induced Fibroid Uterus (Garbhashaya Granthi). The present article is focused on understanding of pathophysiology of Sthoulya induced Fibroid Uterus (Garbhashaya Granthi) with its different dimensions of Ayurvedic treatment.

Key words: Sthoulya, obesity, Santarpanotha Vyadhi, Fibroid Uterus, Garbhashaya Granthi.

INTRODUCTION

As changes occurring in Food style, Lifestyle, Lack of exercise are the main culprit for Obese patients especially in Female. This Obesity is one of the main causes for the Fibroid Uterus (Garbhashaya Granthi).

The Nidanas¹⁰ explained in Santarpanotha Vyadhi are responsible for the Metabolic disorders which vitiates the Agni and Samana Vayu, Thereby it vitiates Kapha and its Gunas like Guru, Manda, Sheeta and Snigdha Guna. This Vikruta Kapha further vitiates Meda and Mamsa Dhatu in Garbhashaya producing Fibroid Uterus (Garbhashaya Granthi).³¹ Fibroid Uterus (Garbhashaya Granthi) can be seen in all the three layers of Garbhashaya i.e., Submucosal Fibroids - Endometrium, Intramural Fibroid -Myometrium, Subserosal Fibroids – Perimetrium.¹¹ The Asymptomatic Fibroids are Kapha Pradhana, Submucous Fibroids presenting with Menstrual irregularities are Vata Pitta Anubandha Avastha, and subserous fibroid presenting with Pressure symptoms are Vata Anubhandha Avastha.

This disease can be properly understood based on the Dosha, Dushya, Agni, Srotas, Vaydhi Avastha, for proper Diagnosis and Management. Uterine Fibroids are the most common abnormal growths that arise from the myometrium of uterus. The symptoms are mostly related to Nature, extension and location of
lesion - further it’s Number, Size, Layer and Location of the Fibroid and the common symptoms include Dysmenorrhea, Menorrhagia, Lower abdominal pain, irregular menstrual cycle etc.

**Nidana Panchaka of Sthoulya induced Fibroid Uterus (Garbhashaya Granthi)**

Sthoulya is one among the Santharpanoththa Vyadhī[1] involving Meda, Mamsa and Kapha Dosha which is responsible for the manifestation of Metabolic disorders. Athisthoulya is mentioned as Medoroga in Madhavanidana[2] and Bhaishajyaratnavali,[3] Where as in Brihatrayi, it is not mentioned as a specific Vyadhī.

Apatarpana is the line of treatment for all the Santarpana Vyadhī[4] and for Metabolic Disorders. As in cases of Sthoulya and Fibroid Uterus (Garbhashaya Granthi) the line of treatment continues the same as because there is an involvement of Kapha and Medo Dhatu. The excessive Meda will get accumulation at Spik, Sthana and Udarastha Meda and the Samprapti and Chikitsa of both these diseases are interlinked with each other.

**Nidana**

**Aharaja**

- **Madhura, Guru, Sheeta, Snighdha, Ahara Sevana**[5] (foods which are sweet, heavy to digest, cold, fatty food substance).
- **Kapha Vardaka Ahara Sevana**[5] (intake of the food, which increases Kapha),
- **Ati Bhakshana**[5] (excessive eating),

**Viharaja**

- **Avyayama**[5] (lack of physical exercise),
- **Divaswapa**[5] (sleeping during day time),
- **Avyavaya**[5] (lack of sexual intercourse),

**Manasika**

- Krodha
- Chinta

**Others**

- Beeja Svabhava
- Agni Vaishamyatva

**Samprapti**

Sthoulya and Fibroid Uterus (Garbhashaya Granthi) are the Santarponotha Vyadhī. There are 2 stages of Samprapti which can be understood in relation to Sthoulya induced Fibroid Uterus (Garbhashaya Granthi). Sthoulya patients are more prone to develop Garbhashaya Granthi hence we need to understand Samprapti in detail. In the initial stage Sthoulya Roga manifested. In the 2nd stage this Sthoulya Roga becomes Nidanaarthakara Roga for the Fibroid Uterus (Garbhashaya Granthi).

**1st stage - Samprapti of Sthoulya:**[6]

- **Nidana Sevana (Kapha and Meda Sadharmi Amsa)**
  - Kapha Dosha Vriddhi
  - Jatharagni Vikriti
  - Medo Dhatwagnimandhya
  - Vikruta Medo Vriddhi and Sanchaya
  - Sanga in Medo Vaha Strotasa
  - Margavarodha Janya Vata Prakopa and Vimarga Gamana of Vayu
  - Sarvnga Sharira Gamana (Vata) especially in Koshtha
  - Jatharagni Sandhukshana
  - Atiaahara Sevana due to Sheegra Jarana
↓ Increases Medo Poshakamsha
↓
Meda Sanchaya
↓
Sthoulya (Medoroga)

In further stage (2nd stage) Sthoulya will act as Ubharyarthakari Nidana for Fibroid Uterus (Garbhashaya Granthi)

↓

Sthoulya
↓
Due to the dysfunctioning of Rasadhatwagni and Samanavayu there will be excessive formation of Ashuddha Rasa
↓

This Ashuddha Rasa having Snigdha, Manda, and Guru Guna affects its subsequent Dhatu and Upadhatus formation.
↓

This results in the formation of Ashuddha Artava (altered steroidogenesis and anovulation).
↓

Which initiates the growth of leiomyoma by abnormally stimulating the Garbhashaya (uterine myometrium).
↓

Smooth muscle hypertrophy in Garbhashaya leads to the development of Uterine Fibroids.
↓

Sthoulya becomes Nidanarthakara Roga (Ubhayarthakari Nidana) for the Fibroid Uterus (Garbhashaya Granthi), the line of treatment of Granthi will follow the same line of treatment as that of Santarpanottha Vikaras i.e., here we follow the both Sthoulya and Granthi Chikitsa.

Samprapti Ghatakas

Dosha
Vata - Samana Vayu, Apana Vayu
Pitta - Pachaka Pitta

Kapha - Kledaka Kapha

Guna
Vata - Sheeta
Pitta - Sasneha, Sara
Kapha - Snigdha, Guru, Slakshna, Sthira

Dushya - Rasa, Rakta, Mamsa, Meda, Artava
Agni
Jhatargni - Mandagni

Dhatvagni - Medo Dhatvagni Mandya
Mamsa Dhatvagni Mandya
Rasa Dhatvagni Mandya
Artava Dhatvagni Mandya
Ama - Sama Avastha
Srotas - Rasa, Rakta, Mamsa, Meda, Artava Vaha
Sroto Dusti Prakara - Sanga (Sthoulya), Granthi (Garbhashaya Granthi)
Udbhava Sthana - Udara, Amashaya
Sanchara Sthana - Medovaha Srotas, Artavaha Srotas,
Adhisthana - Garbhashaya
Vyakasthana - Garbhashaya
Rogamarga - Abhyanthara
Vyadhi Svabhava - Chirakari
Roopa

The Lakshanas related to the Sthoulya induced Garbhashaya Granthi (Fibroid Uterus) includes the pathophysiology of the Santarpanottha Vikaras wherein Sthoulya Lakshanas are more prominent which leads into the manifestation of Fibroid Uterus (Garbhashaya Granthi).

Sthoulya Lakshanas

<table>
<thead>
<tr>
<th>Medomamsa Ativrudhi, mainly at Sphik, Stana Udara Sthand [15]</th>
<th>Excessive fat deposition mainly at the buttocks, chest region and abdominal region.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayathaopachaya [17]</td>
<td>Abnormal fat deposition</td>
</tr>
</tbody>
</table>
Fibroid Uterus (Garbhashaya Granthi) Lakshanas were not directly explained in the Samhitas but Granthi Lakshanas are explained. Depending on the Sthana of the Granthi we can consider the Lakshanas of Fibroid Uterus (Garbhashaya Granthi) as:

वर्गीय विविधता: रूपांतरण महात्मारूढौऽविनियोगितां:।
मेद-कृत्ते महात्मांतिर्मेदनोऽविनियोगिताः॥
(स.सं.११/७)

According to Sushruta Acharya, Medoja Granthi increases or decreases in size based on the Shareera Vrudhi i.e., based on the increase of body fat. It has Unctuous property, Large in size with Less pain and intense itching.[18]

<table>
<thead>
<tr>
<th>Granthibhuta Artava</th>
<th>Clots during menstruation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atyartava</td>
<td>Increased menstrual bleeding</td>
</tr>
<tr>
<td>Kastartava</td>
<td>Pain during menstruation</td>
</tr>
<tr>
<td>Alportava</td>
<td>Decreased menstrual bleeding</td>
</tr>
<tr>
<td>Kastamaithuna</td>
<td>Dyspareunia</td>
</tr>
<tr>
<td>Kukshishula</td>
<td>Pain at the abdominal and pelvic region</td>
</tr>
<tr>
<td>Putragni</td>
<td>Habitual abortion</td>
</tr>
</tbody>
</table>

Diagnostic criteria

Ultrasoundography of Abdomen and Pelvis/ Transvaginal scan - which confirms the presence of Fibroid Uterus (Garbhashaya Granthi) manifesting in different Position, Number, Layers and Size.

- Submucosal (5%) - Endometrium
- Intramural (75%) - Myometrium
- Subserosal (15%) - Perimetrium

Sthoulya can be diagnosed by BMI and Anthropometric measures like waist hip ratio.

To rule out Hypothyroidism tests like Thyroid profile test are done.
To rule out Dyslipidemia Lipid profile tests are done.
To rule out the Cardiac disease cardiac profile is done.
To rule out the cancer Pap Smear is done.

Vyadhi Vavachedhaka

Adenomyosis, PCOD, Uterine tumours, Cervical or Vaginal tumours

Vyadhi Vinischaya: Sthoulya induced Fibroid Uterus (Garbhashaya Granthi)

Chikitsa


Principles and Practice of Medicine in Sthoulya induced Fibroid Uterus (Garbhashaya Granthi)

This article focuses on exploring the Chikitsa Siddantha of the Oushadhi Sadhya Vyadhi. From the Chikitsa Sutra of Santarponoththa Vyadhi, Sthoulya, Granthi, Arbuda, Gulma, Kaphasya Upakrama Chikitsa Siddanta we can adopt some of the treatment principles in the Fibroid Uterus (Garbhashaya Granthi).

The Chikitsa of Sthoulya induced Fibroid Uterus (Garbhashaya Granthi) can be understood in 3 levels

1) Hetu Viparita Chikitsa
2) Dosha Viparita Chikitsa
3) Vyadhi Viparita Chikitsa
Hetu Viparita Chikitsa:

Amapachana is done as Ama is the main cause for the Sthoulya and it acts as inflammatory cause for the Fibroid Uterus (Garbhashaya Granthi).

Chikitsa: Langhana, Pachana, Deepana

Drugs which are used for Amapachana are –

- Agnimukha Choorna,
- Intuppu Kanam Choornam,
- Trikatu Choorna,
- Shivakshara Pachana Choorna,
- Sanjivini Vati,
- Panchalovana Bhasma

Dosha Viparita Chikitsa:

To expel out the Dushitha Dosha from the body Shodhana is carried out.

Shodhana like - mainly Mrudu Vamana, Mrudu Virechana, Lekhana and Tikshna Basti.

<table>
<thead>
<tr>
<th>Panchakarma procedure</th>
<th>Dravya used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vamana</td>
<td>Snehapana- Krishna Tila Taila, Varunadi Ghrita Abhyanga –Tila Taila, Kottamchukadi Taila, Maha Vajraka Taila Vamana- Madhanarapaladi Yoga</td>
</tr>
<tr>
<td>Virechana</td>
<td>Snehapana - Guggulutiktaka Ghrita, Sukumara Ghrita Abhyanga - Nigundiyadi Taila, Dhanwantaram Tailam, Brihat Saindhava Taila Virechana - Trivrutt Lehya</td>
</tr>
<tr>
<td>Basti</td>
<td>Lekhana Basti, Kshara Basti , Uttara Basti</td>
</tr>
<tr>
<td>Udwartana</td>
<td>Kolakulathadi Choorna, Triphala Choorna, Kotamchukadi Choorna</td>
</tr>
<tr>
<td>Nasya</td>
<td>Triphaladi Taila</td>
</tr>
</tbody>
</table>

Vyadhi Viparita Chikitsa

To bring back the equilibrium state of the Dosha, Dhatu, Mala the Shamana Oushadhi are given.

<table>
<thead>
<tr>
<th>Oushadhi Kalpa</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Drugs</td>
<td>Shilajatu, Guggulu, Gomutra, Guduchi, Nagaramatha, Vayavidanga, Nagar, Amalaki, Agnimantha, Shilajatu</td>
</tr>
<tr>
<td>Choorna Kalpanas</td>
<td>Hingwastaka Choorna, Hingwachadi Choorna, Vidanagadi Choorna, Vyoshadi Guggulu Choorna, Gomutra Haritaki, Triphala Choorna, Trikatu Choorna</td>
</tr>
<tr>
<td>Kashaya Kalpanas</td>
<td>Chitrakagranthikadi Kashaya, Saptasara Kashaya, Vizhalveradi Kashaya, Varanadi Kashaya, Guggulutiktakam Kashayam, Hamsapathyadi Kashaya, Sukumara Kashaya, Trayantyadi Kashaya</td>
</tr>
<tr>
<td>Asavaarista Kalpana</td>
<td>Dhanwanataram Arista, Sukumararista, Chavikasava, Gomutraasava, Guggulutiktaka Arista, Khadiraritam,</td>
</tr>
<tr>
<td>Guggulu Kalpana</td>
<td>Kanchanara Guggulu, Triphala Guggulu, Navaka Guggulu, Punarnavadi Guggulu, Trayushandi Guggulu, Kukkutanakhi Guggulu</td>
</tr>
<tr>
<td>Vati Kalpana</td>
<td>Kankayana Vati, Guggulu Panchapala Gulika, Siva Gulika, Vidangadi Gulika, Shilajatvadi Vati, Dwipanchamooladi Vati, Kshara Vati, Gomutra Vati, Trayushnadi Loha</td>
</tr>
<tr>
<td>Taila</td>
<td>Dhanwantraram Taila, Varanadi Tailam, Hingutriguna Tailam, Eranda Sukumara Tailam, Nimbamrutaeranda Tailam,</td>
</tr>
<tr>
<td>Ghrita</td>
<td>Chirovilwadi Ghrita, Hapushadi Ghrita, Misrakasneha, Pathyapada Ghrita, Saptasara Ghrita, Panchatiktra Ghritam, Guggululitaktra Ghrita</td>
</tr>
<tr>
<td>Rasaoushadhi</td>
<td>Gulmakalanala Rasa, Sthoulyantaka Rasa, Kannada Bhasma, Kasisa Bhasma, Tamra Bhasma, Rasa Sindura</td>
</tr>
</tbody>
</table>
Menorrhagia and intermenstrual bleeding should be treated by using Raktaprada (menorrhagia) Chikitsa.[29] Kashaya Pradhana Dravya can be used as Rakta Stambhana Dravya (haemostasis). Further, Rakta Vardhaka treatment is needed to correct the depletion of haemoglobin level because of menorrhagia. Apanavata Anulomana, Vedana Nashana (Analgesic) treatments are needed for the cases with Kashta Rajas (dysmenorrhea). The same Apana Vata Anulomana treatments can be adapted for Maithuna Asahishnuthva (dyspareunia) and Kati Shula (noncyclic pelvic pain). Mutra Doshà (increased urinary frequency) associated with fibroids can be managed with the help of Mutra Shodhaka (urine purification), Mutra Vaha Srotas Avarodha medicines.

**Pathya-Apathya**

<table>
<thead>
<tr>
<th>Ahara Varga</th>
<th>Pathya</th>
<th>Apathya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuka Dhanya (Cereal grain)</td>
<td>Purana Shali, Kodrava, Shyamak, Yava, Priyanga, Laja, Nivara, Karadushaka, Jirna, Prashatika, Kanguni</td>
<td>Godhum, Naveen, Dhanya, Shali</td>
</tr>
<tr>
<td>Shami Dhanya (Pulses)</td>
<td>Mudga, Rajamasha, Kulatha, Chanaka, Masur, Adhaki, Makushtaka, Tila</td>
<td>Masha</td>
</tr>
<tr>
<td>Phala Varga (Fruits)</td>
<td>Kapittha, Jambu, Amalaki, Ela, Bibhitaki, Haritaki, Maricha, Pippali, Eranda, Karkati, Ankola, Narang, Bilvaphala</td>
<td>Madhuraphala</td>
</tr>
<tr>
<td>Drava Varga</td>
<td>Honey, Takra, Ushnjala, Tila And Sarshapa Taila, Milk preparations</td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

In the Samprati (pathogenesis) of Granthi, it is mentioned that Mamsa (muscle fibers), Rakta and Medo Dhatu are vitiated. Several studies have found that an association between obesity and increased incidence of uterine leiomyomas. In a prospective study from Great Britain,[5] the risk of fibroids increased approximately 21% for each 10 kg increase in body weight; similar results were obtained when the body mass index (BMI) was analysed rather than weight. In a case-control study from Thailand,[6] a 6% increase in risk was observed for each unit increase in BMI. Similarly, a large prospective study of registered nurses in the United States found an increased fibroid risk with increasing adult BMI, as well as an increased risk associated with weight gain since age 18 years.[7] A case-control study from Japan likewise reported that women with occult obesity (BMI <24.0 and body fat ≥30%) or women with upper-body fat distribution (>0.80 waist-to-hip ratio) were at significantly higher risk.[8] In a study from Boston, Massachusetts, 51% of the hysterectomies- or myomectomies-confirmed patients with leiomyomata were overweight, and 16% were severely obese.[9] Obesity is one of the risk factors for Fibroid Uterus and increased body fat (Especially abdominal visceral fat) is capable of raising the chances of Fibroid Uterus. The waist -hip ratio of
Perimenopausal women can often be measured as an indicator for screening high risk groups of Fibroid Uterus.[30]

Uterine fibroid needs clear understanding of pathogenesis, with emphasis to the status of different Dosha, their key Gunas and its interaction with Dushya (Dosha, Dhatu, Mala, Upadhatu etc). This disease initially following Prakupita Kapha in Rasa dhatu with Manda, Guru & Snigdha Gunas interact with uterine myometrium by causing increased oestrogen receptor formation/ due to Dustaartava lead by Samana Vayu dysfunction and there by leading to leiomyoma. The Manda Guna of Prakupita Kapha is responsible for its very slow growth and Apakitva. Only after substantial increase in size of the tumour the symptoms are produced, this is the reason behind asymptomatic fibroids. The Vikruta Kapha which interacts with Sthanika Pitta (Pitta which resides in the endometrium) and Vyana Vayu (controller of function of blood circulation in endometrial vasculature) and Apana Vayu (initiator of menstrual efflux) present in the endometrium and myometrium cause the menstrual irregularities. Menstrual irregularities like menorrhagia, menometrorrhagia, metrorrhagia, dysmenorrhea, pressure symptoms, infertility, abortion etc are common features of submucous fibroids. The Chikitsa Siddhanta which is explained for Santarponottha Vikara,[19] Sthoulya Vikara,[13,20] Kapha-Meda Vikara,[21] Kaphasya Upakrama,[22] Granthi,[23-28] Arbuda[26-28] can be included to manage this disease as Kapha Dosa and Dushyas like Mamsa, Meda are involved in all these Vyadh. We are having the medical management for the fibroid uterus of size less than 5cm and >5cm size is advised for surgical management.

CONCLUSION

The disease uterine fibroid is initiated by kapha causing Mamsavaha Sroto Dushti in Garbhashaya resulting in Mamsa Vruddhi (muscular outgrowth). The submucous fibroid and subserous fibroid are the Upadras produced following the Vata Pitta dysfunction and Vata dysfunction respectively. Kapha Prakupita Nidana strongly initiates the pathology by altering the function of Samana Vayu in Artavaaha Srotas at Garbhashaya.

Sthoulya is the diseases which is produced due the involvement of Prakupita Kapha and Meda Dhatu, so by treating the Dushtha Kapha and Meda we can treat both Sthoulya and Fibroid Uterus (Garbhashaya Granthi).

REFERENCES

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