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## **Review Article**

## UNDERSTANDING FIBROIDS IN LIGHT OF AYURVEDA

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#### ABSTRACT

The changing lifestyle and dietary pattern has given way to many gynecological problems in females. Uterine fibroids are one of leading concerns for women in reproductive age. Though uterine fibroids are non- cancerous in character; they exhibit a wide range of symptoms like dysmenorrhea, menorrhagia, metrorrhagia, low backache etc. It significantly hampers the general health and quality of life in women causing great mental agony. Contemporary treatment protocols include hormonal therapy, hysterectomy, myomectomy and uterine artery embolization. Reluctance to undergo prolonged hormone therapy, the fear of surgery brings more and more patient to Ayurveda. Hence more systematic studies in conservative management in these areas of *Stree Roga* are need of the hour.

Ayurveda classics mention various pathological conditions that have features similar to fibroids. Owing to its muscular origin, with slow growth may be better compared to *Granthi* in *Garbhasya*. In the modern era of busy lifestyle, intake of junk food, lack of exercise etc had lead to *Agnivaishamya* and *Ama* formation. This in turn vitiates *Doshas* like *Kapha* and *Vata* and *Dushyas* like *Rasa, Raktha, Mamsa, Medas* and *Arthava* resulting in *Dhatwagnimandya* leading to formation of *Garbhasayagranthi*. The treatment approach is directed towards reducing size of fibroids using *Ushna, Tiskhna, Lekhana Dravyas* along with management of symptoms. The inevitable roles of *Vata* in *Yoniroga* is also taken into account in its management. Combining different treatment aspects of *Granthi* and *Yoni Roga Chitksa*, a unique approach towards the management of its varied presentations added on with lifestyle modification can contribute to healthy social life. The current article focuses and explores potentials of Ayurveda in different aspects of uterine fibroid.

**KEYWORDS:** Uterine fibroid, Agnimandhya, Ama, Dhatwagnimandhya, Garbhasayagranthi, Yoni Roga Chiktsa.

#### INTRODUCTION

The changing dietary pattern in modern era has led to the emerging trend of Fast food culture. Swinging through the drive-thru for energy dense food consisting of high fat and high sugar accompanied by sedentary lifestyle is a major cause increased incidence of lifestyle induced of gynaecological diseases in young women. It is estimated that fibroid uterus has a prevalencee of 20 to 40% among women over the age of 35 years.<sup>[1]</sup> Increased age of marriage, postponement of pregnancy, increased gap between successive pregnancies has also contributed to its increased incidence. 2/3<sup>rd</sup> of women with uterine fibroids are concerned about missed days at work and strongly feel the symptoms prevent them from reaching their career potential. The symptoms like heavy prolonged irregular acyclic bleeding, frequent periods, pressure on bladder, chronic pelvic pain & low backache, pain during sexual intercourse, infertility, repeated

pregnancy loss have negative impact on their life affecting performance at work and family relations.<sup>[2]</sup> Fibroids being associated with pressure effects and excessive uterine bleeding, rank major cause for hysterectomies in reproductive age accounting for approximately one-third of all hysterectomies or about 2,00,000 hysterectomies/year.<sup>[3,4]</sup>

Contemporary treatment protocols include hormonal therapy, hysterectomy, myomectomy and uterine artery embolization. Reluctance of patients to undergo prolonged hormone therapy, the fear of surgery and usual mentality of patient in preserving the anatomical and functional integrity of the body bring them to Ayurveda or any other alternative treatment of their choice.

#### MATERIALS AND METHODS

Methodology primarily includes literature review of Ayurvedic classics and relevant texts of contemporary science which are critically analyzed.

#### **DISEASE REVIEW**

Fibroid is the commonest benign tumour of the uterus. These are more common in nulliparous or in those having one child infertility.<sup>[5]</sup> They are oestrogen sensitive tumors which develop during the reproductive years and generally shrink after menopause.<sup>[6]</sup> Fibroids are broadly classified as that located in body and cervix of uterus. Those located in the body of uterus is further divided into intra mural. sub mucous and sub serous fibroid. Myomas that grows outwards towards the peritoneal surface, are termed 'sub serous' on the other hand those grow symmetrically and remain within the myometrial wall are termed 'intramural' or 'interstitial'. Myoma that grow towards the cavity where it is covered only by a thin endometrium is termed as 'submucous' myoma<sup>[7]</sup>. Fibroids on cervix are divided into anterior, posterior, central and lateral.

About 75% of fibroids are intramural in position. Fibroids in the body produce symptoms like menstrual abnormalities, dysmenorrhoea, dyspareunia, infertility, recurrent pregnancy loss, lower abdominal pain, pelvic pain, abdominal enlargement and urinary symptoms.<sup>[8]</sup> The intensity of symptoms varies according to site of fibroid. Progressive menorrhagia are seen in intramural and submucous myoma. Metrorrhagia is common with submucous fibroids.<sup>[9]</sup> Congestive dysmenorrhea is seen in cases where fibroids distort shape of uterine cavity affecting the uterine contraction.

## DISCUSSION

## **Ayurvedic View on Fibroids**

Various terminologies like Granthi, Arbuda, Sopha, Gulma, Vidradhi, Arsas etc described in ancient Ayurveda classics seems to be similar to tumours or cystic swellings. There is no direct reference of uterine fibroid in Ayurveda. Susruta acharya mentions that main clinical feature of Granthi, Vidradhi, and Alaji is Sopha or swelling.[10] When Granthi becomes large is called Arbuda.<sup>[11]</sup> Due to its fast growing in nature it can be correlated to malignant neoplasms. Vidradhi is caused when aggravated Doshas vitiate the Twak, Raktha, Mamsa, *Medas* and *Asthi* produces a rooted deep, painful and round swelling.<sup>[12]</sup> In fibroids usually suppuration does not occur, so it may not be correlated to Vidradhi. Arsas are fleshy outgrowths sprouts of muscles, skin and fat tissue growing in rectum, nose, ears, skin due to vitiation of Tridoshas in Twak, Mamsa and Medas.<sup>[13]</sup> Fibroids being mainly muscular

in origin, with slow growth may be better compared to *Mamsagranthi* occurring in Garbhasaya.

Avurveda mentions *Granthi* as localized swelling in different part of the body. It is derived from root word 'Grandhana' meaning tying or stringing together or not. It refers to local accumulation of *Dushita Dhatu* in weaker parts of the body. Acharya susrutha opines the term Granthi is coined due to its *Vigratitwa* or hard nature and further mentions different shape and consistency for Granthi viz., Vrittha (round), Unnata (elevated) and Vigrathitha (hard or compact).<sup>[14]</sup> Commentators of Madhava nidana further state the consistency of *Granthi* to be *Kathina* (rigid) and *Karkasha* (rough).<sup>[15]</sup> Astanga sangraha opines that *Granthi* is mainly *Kapha Pradhana Vvadhi* along with involvement of Mamsa, Medas and Raktha.<sup>[16]</sup> Five types of *Granthi* are enumerated in Ayurveda classics. Charaka acharya adds *Mamsagranthi* as sixth type. Vagbhata acharya further adds three more types viz: Asthi, Raktha and Vrana. The description of Mamsagranthi told by Acharya Vagbhata are *Snigdham* (smooth), *Mahantam* (big), *Kathinam* (hard) and studded with arteries and veins caused due to ingestion of Mamsa ahara.[17] The attributes of Kathinya (hardness), *Ghanatwa* mvoma like (solidification) and *Gaurava* (heaviness) are *Kaphaja* in nature. On the other hand Kharatwa (rigid), *Parusatwa* (roughness) are attributes of *Vata*.

## Ethiopathogenisis

Acharaya Susrutha says the Nidana of Sopha like intake of Gramya Mamsa, Ajeerna Ahara, Diwaswapna etc are also causative factors for formation of *Granthi*.<sup>[18]</sup> Acharva vaghata says disease pertaining to female genitalia is not possible without the involvement of Vata and further describes Dushta Bhojana, Dushta Arthava, Beeja Dosha and Daivta as causative factors.<sup>[19]</sup> Dushta bhojana include factors that vitiate Mamsa and Medho Dhatu like Guru Abhishvandhi Bhojana along with Mithva Viharas like Divaswapna, Avyayama etc lead to Agni Vaishamya and Sroto Vaigunya. Varying types of chromosomal abnormalities like translocation, deletion, trisomy associated with fibroids signifies to Beeja Dushti. *Dhatus* takes nutrients required from circulating fluid through Srotas (pores) by the action of Dhatwagni. Abnormalities in functions of Agni lead to Kha Vaigunya and further formation of Ama. The Samarasa produce Dhatwagnimandya which results in further vitiation of *Dushyas* like *Raktha* and *Mamsa* in susceptible individuals. Granthi is mentioned among Vriddhi and Dusthi Lakshanas of Mamsa Dhatu.<sup>[20,21]</sup> When *Kha Vaigunya* occur in *Garbhasaya*, it leads to vitiation and accumulation of Mamsa Dhatu leading to Granthi formation in Garbhasaya. Heaviness of abdomen and congestive feeling before Raja Kala can be considered as Poorvaroopa and Srotodusthi Lakshanas like Atipravarthi and Sanga are seen. There is involvement of Rasa, Raktha, Mamsa. Medo and Arthavavaha Srothas that leads to manifestation of *Garbhasava Vikrithi*. The symptoms are exhibited during Vyakthi state of Shadkriyakala, during which the disease is strong. When they are present in *Garbhashava* (uterus), it cause increase in the surface area resulting in pressure symptoms upon adjacent organs. They present as low backache and pelvic symptoms due to pressure exerted on spine and adjacent areas when they exert pressure on adjacent organs like urinary bladder and rectum, they cause incontinence or retention of urine and faeces. This also causes distortion in shape of uterus causing Apana Vaigunya. Arthava Niskramana Kriya is function of Apana Vavu. Added on with Apanavavu Dushti Nidanas like Rooksha -Guru Anna, Vegadarana *Chakramana* lead to increased uterine and contraction resulting in Arthava Ruia (congestive dysmenorrhea). When susceptible individuals indulge in Vidahi Anna, Ati-Lavana-Amla-Katu Sevana and Anoopa-Auduka Mamsa lead to vitiation of Pitta and Raktha along with Vata leads to Utkramana in *Raktha Pramana* (increase in amount of bleeding) through *Rajovha Sira* leading to *Arthava Atipravarthi* or *Asrigdara*.<sup>[22]</sup> The increased surface area extends into uterine cavity exhibit as disturbance in menstrual cycle like menorrhagia, metrorrhagia.

## **Clinical presentations**

- The symptoms like *Presta Vamshana Shoola* and *Artava Ruja* are seen in intramural fibroid, located in the outer walls expand outwards and produce pelvic pain, back pain, congestive dysmenorrhea and generalized pressure symptoms.
- The symptoms of *Raktha Athipravarthi* or *Asrigdara* (menorrhagia and metrorrhagia) are seen in sub mucous fibroids located inside the uterine cavity. They present as heavy bleeding, prolonged menses and inter menstrual bleeding.
- The symptoms like feeling of heaviness of abdomen are seen in sub serous fibroid located outside the myometrium.

It is not mentioned among *Vimsathi Yonivyapth*. Symptoms of fibroids are seen in different *Yoni Rogas.* 

- Vamskhana Parswa Ruja and Gulma in seen in Vathiki
- Prista Jangha Ura Vamshana Ruja in Prakcharana
- Excessive bleeding is seen in *Raktha Yoni* and *Asrigdharam*

• Sparsna Asahsnatwa (dyspareunia), Basti – Kukshi Gurutwam and Sroni Vamshana Ruja is seen in Parilplutha.<sup>[23]</sup>

#### Management

Chiktsa is defined as 'Ruk Prathikriya'. Acharya Susrutha give emphasis on 'Nidana *Parivarjana'* or the eradication of etiological factors is primarly important in the treatment of disease. In case of uterine fibroid; indulgence of Ahara and Vihara that can vitiate Vata, Kapha Doshas and Rasa, Raktha, Mamsa, Medo and Arthava Dhatus should be avoided. Considering the inevitable role of Vata in manifestation of Yoni Roga, Vathika Yoni Roga Chiktsa like Seka, Abhyanga, Pichu Kriya can be incorporated in the management. *Granthi* is considered as caused due toMandhagni, Ama along with vitiation of Vata and Kapha. Langhana and Deepana - pachana Dravyas can be administered. Treatments should be aimed at improving the Agni and Anulomana of Vata. Dushita Dhatus like Raktha. Mamsa and Medas should be also taken into account. Sthoulya Chiktsa can be administered to tackle *Medo- Dushti*<sup>[24]</sup>. Kapha Vata Hara drugs, Tikshna, ushna Vatanulomana, Shotagna, Kledaghna, Lekhana and Chedana can be adopted to reduce the size of fibroids. The Formulations used commonly include *Kanchanara Guggulu*, Shigu Guggulu, Palasa Twak Kshara, Varunadi Kashayam, Chitraka Granthikadi Kashayam, Kalyanaka Kshara etc. Many clinical trials and case studies have been conducted in conservative management of fibroids. Comparative study using 6gm of Jalakumbhi churna and 6gm of *Nagkesar churna* twice daily for 2 months showed that the trail drug Jaalakumbhi churna was effective in excessive bleeding, low back ache and reducing size of fibroid when compared with control drug<sup>[25]</sup>. Clinical study of 500mg *Palasa Twak Kshara* was found effective in management of uterine fibroids<sup>[26]</sup>. Case series using 250mg of *Kanchanara* Guggulu, 250mg of Shigru Guggulu and 3g of Haridrakanda twice daily for 7 weeks with Ksheera as Anupana was in management of uterine fibroids.<sup>[27]</sup>

Rakta Prasadana, Raktha Stambhana Upayas can be used in Raktha Vriddhi or heavy bleeding. Samsodhana, Sastrakarma (surgery), Kshara Prayoga are prescribed in Mamsa Vriddhi and Dusthi.<sup>[28]</sup> Growth of fibroids is limited to reproductive period, so while considering treatment, age of patient should be taken into account. When fibroids present with heavy, prolonged menstrual periods Asrigdara Chikitsa and Rakthapitta Chiktsa can be done. Musali Khadiradi Kashayam, Asoka Valkala Ksheerapaka, Pushyanaga Choornam etc. indicated in Pradara can be used for relieve excessive bleeding associated with fibroids also. If they exhibit pressure symptoms like low backache, lower abdominal pain and pain on the

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Vathika Roga flanks Yoni Chikitsa can be administered. Sapthasaram Kashavam. Gandharvahastadi Kashyam, Sukumaram ghritam, Hingu triguna tailam, Rasna Swadamstra Siddha *Pavah* etc can be given for getting symptomatic relief from painful menstruation associated with fibroids. it presents with urinary symptoms, When Mutrakrichra Chiktsa can be done. Punarnavadi Kashayam, Brihatyadi Kashayam, Chandraprabha Vati are formulations commonly used. In GIT problems like constipation, bloating related with fibroids; Agni-Deepana and Arsa treatment principlescan be adopted. In these conditions; Gandharvahastadi Kashayam, Chiruvilwadi Kashayam, Vaiswanara *choornam, Abhavaristam* can be given. Since uterine fibroid is a Mamsajanva Vikara; Mamsa Vridhi Chikitsa can be administered. In Amaavastha of Granthi, treatment prescribed for Sopha is to be administered and in Pakwa Avastha, after cleansing therapy the *Granthi* along with its capsule is excised with *Sastra* and cauterization is done. Further *Vrana* Chikitsa is prescribed.<sup>[29]</sup> Caraka acharya has advised enucleating of Granthi along with its Kosa or capsule.<sup>[30]</sup> In women approaching menopausal age, small fibroids which are asymptomatic can be managed by medication and regular periodic follow up while surgery is advised in big fibroids.

Acharya Charaka says that treatment of Granthi in *Kukshi* and *Udara* is difficultand further explains *Granthi* developing at the place of *Marma* or *Granthi* due to *Asthi, Vrana, Mamsa* and *Sira* are incurable. Acharya Vagbhata mentions *Granthi* due to *Vataja, Pittaja, Kaphaja, Raktaja* and *Medaja* are curable<sup>[31]</sup>.

Acharyas of Ayurveda has mentioned ideal age of conception to be 16 and 21 years.<sup>[32]</sup> Increased age of marriage, postponement of pregnancy and improper food habit and sedentary lifestyle are common causes of gynecological disorders including fibroid. *Pathyas* mentioned in *Yoni Roga* like *Yavaannam, Abhayarishtam, Pippali, Lasuna, Amalaki* along with *Vyayama* like jogging, swimming, yoga etc should be included in routine life for healthy body and sound mind.<sup>[33]</sup>

## CONCLUSION

Young couples must be counselled about greater risk of developing fibroids and other gynecological diseases by postponing first pregnancy. *Kapha Medo Vardhaka Aharas* like *Mamsa Bhojana*, junk foods, pizzas etc should be avoided. The Acharyas gives emphasis to *Nidana Parivarjana* and also elaborates the importance of *Dinacharya*, *Rithucharya*, *Rajaswalacharya* and their role in upbringing healthy womanhood. Thus with Ayurvedic medications and life style modification, we can assure women to reach higher potentials of personal and professional life.

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