

Systemic Review of Ayurvedic Protocol in Management of Uterine Fibriod

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Abstract—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 Agnivaishmya 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 Chikitsa, 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.

Index Terms—Uterine fibroid, Agnimandhya, Ama, Dhatwagnimandhya, Garbhasayagranthi, Yoni Roga Chikitsa

I. INTRODUCTION

Uterine fibroid, a noncancerous growth of the uterus that often appear during childbearing age of female and also known as fibromyomas, leiomyomas or myomas; is one such gynecological disorder which is posing a major health problem.[1] Less than 0.1% of all uterine fibroids are malignant. Regardless of benign neoplastic character, uterine fibroids are responsible for significant morbidity in a large segment of the female population. The clinical effects are related to their local mass effect, resulting in pressure upon adjacent organs, excessive uterine bleeding, or problems related to pregnancy, including infertility and repetitive loss of pregnancy.[2] As a consequence of these local pressure effects and bleeding, uterine

fibroids rank as a major reason for hysterectomy accounting for approximately one-third of all hysterectomies or about 2,00,000 hysterectomies/year.[3,4] Fibroids are of unicellular origin and possess a distinct autonomy from their surrounding myometrium because of their outer connective tissue layer which allows leiomyomas to be easily “shelled out” of the uterus during surgery.[5,6] Localized nodular swelling/growth has been referred under the name of *Granthi* that develops due to localization of morbid body humors in body tissue.[7] It protrudes like joint of bamboo/joint between two parts of a plant or kernel of the fruit of *Amalaki* (*Emblia officinalis* Gaertn.) and is relatively hard and tough, glandular or nodular swelling; knotty, hard and rough appearance. Pathogenesis of *Granthi* is propounded as when morbid *Tridoshas*, vitiate *Rakta* (blood), *Mamsa* (fleshy/muscles), and *Meda* (fat/adipose tissue) that are admixed with *Kapha* produce rounded protuberant, knotty or glandular and hard swelling called *Granthi*. [8] Etiopathogenesis, clinical features and treatment of *Granthi*, are identical to the *Granthi* of any other body part, however few clinical features present due to a specific location of the disease as a result of anatomical and physiological disturbance.[8,9] *Granthi* when present in yoni (female reproductive system)/*Garbhashaya* (uterus) will lead to disturbed menstrual cycle-menorrhagia, metrorrhagia, dysmenorrhea, etc., along with infertility. On per vaginal examination, bulky uterus is felt. Such clinical entity is diagnosed today as Uterine fibroid where in *Vata Dosha* (humor) is the predominant pathological factor being the natural site of its location (*Basti Pradesh*) in the body. In Ayurvedic literature total, nine types of *Granthi* have been mentioned depending upon the pathological factor, and the body tissue involved.[10,11,12] Fibroids can be related to the “*Granthi*” mentioned in

Ayurvedic texts, and it can be managed according to the principle of *Samprapti Vighatana* (to break the pathogenesis).

II. DISEASE REVIEW

Fibroid is the commonest benign tumour of the uterus. These are more common in nulliparous or in those having one child infertility. They are oestrogen sensitive tumors which develop during the reproductive years and generally shrink after menopause. 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. 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. 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. Congestive dysmenorrhea is seen in cases where fibroids distort shape of uterine cavity affecting the uterine contraction.

III. 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. When Granthi becomes large is called Arbuda. 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. 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. Fibroids being mainly muscular in origin, with slow growth may be better compared to Mamsagranthi occurring in Garbhasaya.

Ayurveda 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 susruta 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). Commentators of Madhava nidana further state the consistency of Granthi to be Kathina (rigid) and Karkasha (rough). Astanga sangraha opines that Granthi is mainly Kapha Pradhana Vyadhi along with involvement of Mamsa, Medas and Raktha. 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. The attributes of myoma like Kathinya (hardness), Ghanatwa (solidification) and Gaurava (heaviness) are Kaphaja in nature. On the other hand Kharatwa (rigid), Parusatwa (roughness) are attributes of Vata.

IV. ETHIOPATHOGENESIS

Acharaya Susrutha says the Nidana of Sopha like intake of Gramya Mamsa, Ajeerna Ahara, Diwaswapna etc are also causative factors for formation of Granthi. Acharya 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. Dushta bhojana include factors that vitiate Mamsa and Medho Dhatu like Guru Abhishyandhi Bhojana along with Mithya 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. 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 Poorvaroopas 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 Garbhasaya Vikrithi. The symptoms are exhibited during Vyakthi state of Shadkriyakala, during which the disease is strong. When they are present in Garbhashaya (uterus), it causes 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 Vayu. Added on with Apanavayu Dushti Nidanas like Rooksha - Guru Anna, Vegadarana and Chakramana lead to increased uterine contraction resulting in Arthava Ruja (congestive dysmenorrhea). When susceptible individuals indulge in Vidahi Anna, Ati-Lavana-Amla-Katu Sevana and Anoopas 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. The increased surface area extends into uterine cavity exhibit as disturbance in menstrual cycle like menorrhagia, metrorrhagia.

V. 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 are 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.

VI. MANAGEMENT

Chikitsa is defined as 'Ruk Prathikriya'. Acharya Susruta give emphasis on 'Nidana Parivarjana' or the eradication of etiological factors is primarily 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 Chikitsa like Seka, Abhyanga, Pichu Kriya can be incorporated in the management. Granthi is considered as caused due to Mandhagni, 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 Chikitsa can be administered to tackle Medo-Dushti. 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. Clinical study of 500mg Palasa Twak Kshara was found effective in management of uterine fibroids. 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. 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. 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 Chikitsa can be done. Musali Khadiradi Kashayam, Asoka Valkala Ksheerapaka, Pushyanaga Chooranam 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 flanks Vathika Yoni Roga Chikitsa can be administered. Sapthasaram Kashayam, Gandharvahastadi Kashyam, Sukumaram ghritam, Hingu triguna tailam, Rasna Swadamstra Siddha Payah etc can be given for getting symptomatic relief from painful menstruation associated with fibroids.

When it presents with urinary symptoms, Mutrakrichra Chikitsa 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 principles can be adopted. In these conditions; Gandharvahastadi Kashayam, Chiruvilwadi Kashayam, Vaiswanara choornam, Abhayaristam can be given. Since uterine fibroid is a Mamsajanya Vikara; Mamsa Vriddhi 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. Charaka acharya has advised enucleating of Granthi along with its Kosa or capsule. 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 difficult and 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. Acharyas of Ayurveda has mentioned ideal age of conception to be 16 and 21 years. 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, Abhayaristam, Pippali, Lasuna, Amalaki along with Vyayama like jogging, swimming, yoga etc should be included in routine life for healthy body and sound mind.

VII. DISCUSSION

Chikitsa is defined as 'Ruk Prathikriya'. Acharya Susrutha give emphasis on 'Nidana Parivarjana' or the eradication of etiological factors is primarily 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. Granthi is considered as caused due to Mandhagni, 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 Chikitsa can be administered to tackle Medo-Dushti[10] Kapha Vata Hara drugs, Tikshna, ushna Vatanulomana, Shotagna, Kledaghna, Lekhana and Chedana can be adopted to reduce the size of fibroids. The Formulations used here is Kanchanara Guggulu, Kanchanara Guggulu is a classical Ayurvedic formulation, used for Kapha accumulations in the tissues. As Kapha moves deeper within the system, it may manifest as swollen lymph nodes, cysts or growths. Powerful decongestants such as Kanchanara, Triphala (a combination of fruits of Terminalia chebula Retz., Terminalia belerica Roxb., and E. officinalis), and Trikatu (Zingiber officinale Rosc., Piper nigrum L. and Piper longum L.) are mixed with Guggulu to break down and eliminate hardened Kapha. This detoxifying blend supports the proper function of the lymphatic drainage and digestive systems, aiding in the

prevention of further Kapha accumulation. Its main ingredients Kanchanara (*Bauhinia variegata* L.), Varuna (*Crataeva nurvala* Buch.-Ham.), Triphala, Trikatu, Trijataka may also useful in hypothyroidism. Kanchanara Guggulu supports proper function of the lymphatic system, balances Kapha Dosha, promotes elimination of inflammatory toxins; it is alterative, anti-inflammatory and tonic and is administered in cysts, malignant ulcers, syphilis, fistula, scrofula, sinus, etc., Kanchanara is very useful in extra growth or tumors and helps in reducing bleeding. [13] Chandra prabha vati possesses teekshna, ushna, deepaka, shreshta pachaka, tridosha hara properties and is indicated in shoola, granthi, arbuda, artava shoola. It is also vrishya and rasayana. Chandra prabha vati reduces urinary frequency and urine incontinence. Ashokarishta is effective in scanty menstruation and menorrhagia. It is useful in Yoni roga i.e., Asrgdara ruja, Yoniruja and Shwetapradara. [14] Ashokarishta is indicated in Gynaecological problems viz. menstrual pain, ovarian pain and uterine inflammation, menorrhagia, metrorrhagia, uterine bleeding disorders and cystitis. Ashokarishta has a specific action on the mucosa of the uterus and GIT; reduce their catarrhal and superlative inflammation caused by pitta and thus also regularise Vata. It has Blood purifier, haemostatic antiinflammatory and anti- secretory effects. Kumaryasava is recommended for wide ranging female health issues such as menstrual complications, infertility, ovarian dysfunction, etc. It shows very good results in irreregular periods and PCOS. For women suffering from scanty menstrual flow, Kumaryasava is recommended as it improves flow and regulates the periods.

VIII. CONCLUSION

Uterine fibroid is seen during reproductive life of a female irrespective to the age, which may result in various menstrual problems such as dysmenorrhea, menorrhagia, and irregular periods, by disturbing anatomical as well as physiological integrity. Medical management of this problem is possible on the basis of Ayurvedic fundamental principles Young couples must be counselled about greater risk of developing fibroids and other gynecological diseases. 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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