



Analysis of uterine fibroids: An Ayurvedic perspective

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Abstract

Ayurveda, a natural system of medicine, originated in India more than 3,000 years ago. The remedies mentioned in Ayurveda are based on the basic ayurvedic perspective that individuals with the same disease may differ, and hence the treatments given to individuals with the same disease can also be different. Women's gynaecological problems have increased as their lifestyle and dietary habits have changed. According to Ayurveda, the causes of Yoniroga include Ahithahara and Ahithavihara. (Abnormal dietetics and mode of life.) One of the most common non-cancerous neoplasms of the uterus is uterine fibroid, or leiomyoma. Though they are benign in character, they exhibit a wide range of symptoms like dysmenorrhoea, menorrhagia, low back pain, repeated pregnancy loss, and infertility. The majority of gynaecological disorders fall under the category of yonivyapath or yonirogas. Considering the symptoms of fibroids like menorrhagia and dysmenorrhoea, explanations of yonirogas such as asrgdara, rakthayoni, asrja, and vatiki can be available. Uterine fibroids are one of the causes of infertility and repeated abortions. While going through this, the explanation of Jathaghni and Vandhyatha is also mentioned under Yonirogas.

Key words : Ayurveda, Uterine fibroid, Dysmenorrhoea, Menorrhagia, Infertility, Asrgdara, Jathaghni, Vatiki

Introduction

Uterine fibroids are the commonest cause of enlargement of the uterus in gynaecological practice. It is a non-cancerous uterine tumour that develops from the myometrium. As many as one in four women of reproductive age are found to have at least one fibroid on ultrasound. They are also the commonest reason for hysterectomy and are seen in about 70% of uteri removed at hysterectomy. They arise from the myometrium and consist of varying proportions of smooth muscle and fibroblasts.¹ It is a well-circumscribed tumour with a pseudocapsule. It has a firm consistency. The capsule consists of connective tissue that fixes the tumour to the myometrium.

Asymptomatic fibroids affect up to 50% of women. These fibroids are detected during a gynaecological checkup or ultrasound scanning done for unrelated symptoms². Fibroids are oestrogen-sensitive and frequently grow quickly. The rate of growth seems to be semiquantitatively linked to the number of oestrogen and progesterone receptors. Rapid growth raises the possibility of malignant change within the fibroid, although this is extremely rare. Leiomyosarcoma is the most common malignant tumour of the uterus³.

Incidence

The true fibroid incidence is unknown because many women with these tumours are asymptomatic⁴. It is estimated that nearly 20% of women of reproductive age harbour uterine myomas of different sizes, and more than 30% of women beyond the age of 30 have myomas. After menopause, the myomas shrink and reduce in size. They may become calcified at times⁵.

Pathology

The consistency of the myoma is spherical, lobulated, and firm. It is surrounded by a pseudocapsule, which is formed by the compression of the myometrial tissue surrounding the myoma⁵. The capsule consists of connective tissue, which fixes the tumour to the myometrium. Because of the presence of this pseudocapsule, the myomas can be easily enucleated from the uterine wall. The cut surface of the tumour is pinkish-white and has a whorled appearance. These myomas are generally lighter in colour than the surrounding myometrium.

Symptoms

Symptoms of fibroids are generally classified into the following categories: abnormal uterine bleeding, pelvic pressure symptoms, pain, and reproductive dysfunction. Abnormal uterine bleeding occurs in the form of prolonged bleeding and excessive bleeding with clots. Bleeding abnormalities are caused by increased endometrial surface area in submucous fibroid and associated endometrial hyperplasia. Oedema of the lower limbs occurs when a large fibroid compresses lymphatics. When broad ligament fibroid presses on the sciatic nerve, it causes pain. Large fibroids in the posterior wall may cause constipation, and those in the anterior wall may cause urinary symptoms⁶ As the tumours grow, pressure is exerted on adjacent organs, especially the urinary tract and rectosigmoid. The associated urinary tract manifestations include frequency, outflow obstruction, and ureteral obstruction with hydronephrosis⁷.

The mechanism by which the fibroids affect fertility is uncertain, but it is believed that the submucous fibroids distort the uterine cavity and affect the implantation of embryos. Other symptoms related to pregnancy are abortion, premature labour, malposition, malpresentation, obstructed labor, and abnormal uterine contractions.⁸ Infertility may be associated with submucosal fibroids^{9,10} or a markedly distorted endometrial cavity induced by big intramural myomas, which both may interfere with embryo implantation or sperm transportation.¹¹

Ayurvedic description

In Ayurveda, there is no specific description of a uterine fibroid or tumour in the garbhasaya. Tumors are considered grandhis in the Ayurvedic classics, and when they appear in the garbhasaya, they are considered equivalent to grandhis. Grandhi develops due to the vitiation of dosha and dusha followed by their accumulation at one place, producing protuberance, and is relatively hard and rough in nature.¹²

Yoniogas

Yoniogas are mentioned in different Ayurvedic classics, and almost all the gynaecological diseases fall under this heading. According to the acharyas, there are a total of 20 yoniogas based on dosha vitiation¹³. A healthy yoni, or reproductive organs, is essential for the conception, growth, and delivery of a healthy child.

Coming to the Nidana: Mityachara, Mitya Vihara, Mityahara, Artavadushti and Beeja Dushti were responsible for different types of yoniogas¹⁴.

Considering the symptoms of fibroids like Atyarthava, the treatment of Yoniogas such as Asrgdara, Rakathayoni, and Asrja can be adopted¹⁵. The uterine Fibroids are one of the causes of repeated abortions and infertility. So Jathaghni and Vandhyatha, which are also explained under yoniogas, are also considered while treating fibroids with these symptoms¹⁶. Another symptom of uterine fibroid is artavasula or krichrartava, so the description of Vatiki Yonioga is also included¹⁷.

Nidana of yoniogas

Yoniogas develop due to nidanas (causative factors) like Mithyahara, Mithyavihara, Arthavadushti, Beejadushti, and Daivatha (an unknown cause)¹⁸.

Yoniogas having dysmenorrhea

In the Ayurvedic classics, dysmenorrhea is referred to as Kashta artava and is mentioned as a symptom rather than a disease in many gynaecological disorders. Aggravated Vata dosha is the cause of all types of pain in the body. Apana vata (a subtype of vata), which is responsible for normal regulation of menstruation, gets disturbed due to some causative factors, and vata gets vitiated. This causes painful menstruation. Many of the Yonivyapad mention Kashtaartava features as symptoms.

Some of them, along with their lakshanas (symptoms), are as follows:

Vatiki

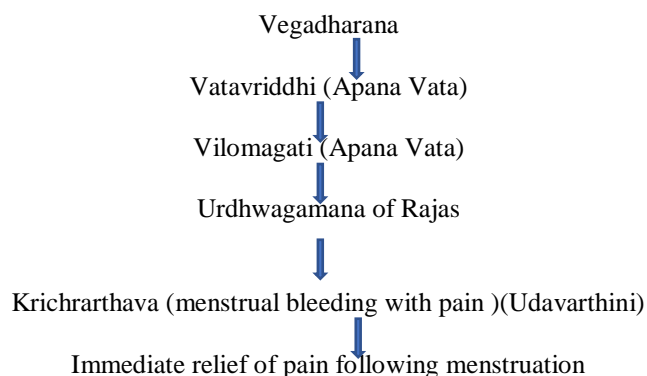
According to Carakacharya, a woman of vata prakriti consumes vata, aggravating ahara, and vihara leads to aggravation of vata. This vata, when reaching the reproductive organs, produces pricking pain, stiffness, roughness, fatigue, and the sensation of creeping ants. Because of the vitiation of Vata, menstrual bleeding occurs with sound and is painful, frothy, thin, and dry¹⁹.

Udavartini

Caraka says that due to vegadharana, vata gets vitiated, and this aggravated vata then moves in the reverse direction and fills the yoni. So the yoni affected by pain initially pushes the artava rakta in an upward direction, then exhales it with difficulty. The woman feels relief immediately following the discharge of menstrual blood. Here the rajas or artavarakta moves upwards in the opposite direction, hence it is termed Udavartini²⁰.

Samprapthi

Srotodushti occurs when vitiated vata travels through the srotases. Here, the types of srotodushti are sanga and vimargagamana. Then the menstrual blood gets obstructed in the yoni and produces various symptoms along with dysmenorrhoea.²¹



Samprapthi Ghataka

Doshas - Vata, Apana Vata

Dushya - Rasa, Rakta, Mamsa, Artava

Agni - Jatharagni. Dhatvagni mandya

Strotas - Rasa, Rakta, Artava vaha srotas
 Srotodushti - Vimarga gamana Roga marga - abhyantara
 Sthanasamsraya - Yoni

Asrugdara or Rakthapradara

Heavy or irregular menstrual bleeding is one of the most common symptoms of a uterine fibroid. Heavy menstrual bleeding is called Asrugdara or Rakthapradara in Ayurveda. Asrik, which means blood, and Dhara, which refers to excessive ^{flow}^{15,22}.

Nidana of Asrugdara

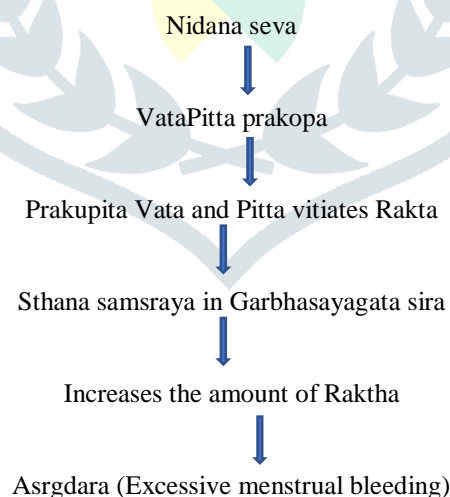
Women's vata is aggravated by the consumption of excessively salty, sour, katu, vidahi, and unctuous ahara, curd, sukta, mastu, and madya, which then vitiate raktha. Asrugdara occurs due to the aggravation of vata, especially apanavata, which is responsible for the expulsion of menstrual blood^{23,15,24}

Nidana of Asrugdara

	Rasa	Guna	Virya	Vipaka	Karma
Aharaja	Amla Lavan Katu	Guru Snigdha Ushna Sara Sukshma	Ushna	Katu	Dhatvagnimandya Strotodushtikara Rakta atipravrutti Raktavikaras Daurbalyata Pandu
	Vataja	Pittaja	Kaphaja		
Viharaja	Atimaithun Ati Yana Atiadhva Atikarshan Bharvahan Garbhaprapata				Diwa Swapna
Manasika	Shoka, Krodha, Bhaya				
Others	Abhighataja Vatapurita Kshseeranadi				

Samprapti.

According to the above explanation, nidana increases rakta, and reaching the rajovaha sira of the uterus increases rajas. This extra menstrual blood is expelled in the form of heavy bleeding, both in quantity and duration. In Asrugdara, Vata is the causative dosha, and Raktha is the affected dushya. Raktha and Pitta are similar in properties, so naturally, Rakta vitiation aggravates Pitta also. This aggravated pitta covers the apanavata, and thus Vayu gets aggravated. The symptoms and treatments are similar to those of Rakathapitha²⁵.



Samprapti Ghataka

- Dosha – Vata Pitta
- Dushya – Rasa, Rakta, Artava
- Agni Dushti– Jataragni Mandya, Dhatwagni Mandya
- Srotas – Rasavaha, Raktavaha, Artavavaha
- Srotodushti – Ati Pravritti
- Udbhava Sthana & Adhithana –Garbhashaya
- Sanchara Sthana – Garbhashaya ,Yoni Pradesha
- Vyadhimarga – Abhyantara

Samanya lakshana

Menstrual bleeding is excessive in quantity or duration, even during periods other than the menstrual phase, and has the characteristics of specific doshas as well as symptoms such as body ache and pain²⁶. Asrgdara has burning in the lower part of the abdomen, according to Dalhana (Vamkshana, Sroni, Prushta, and Vrikka)²⁷.

Raktayoni

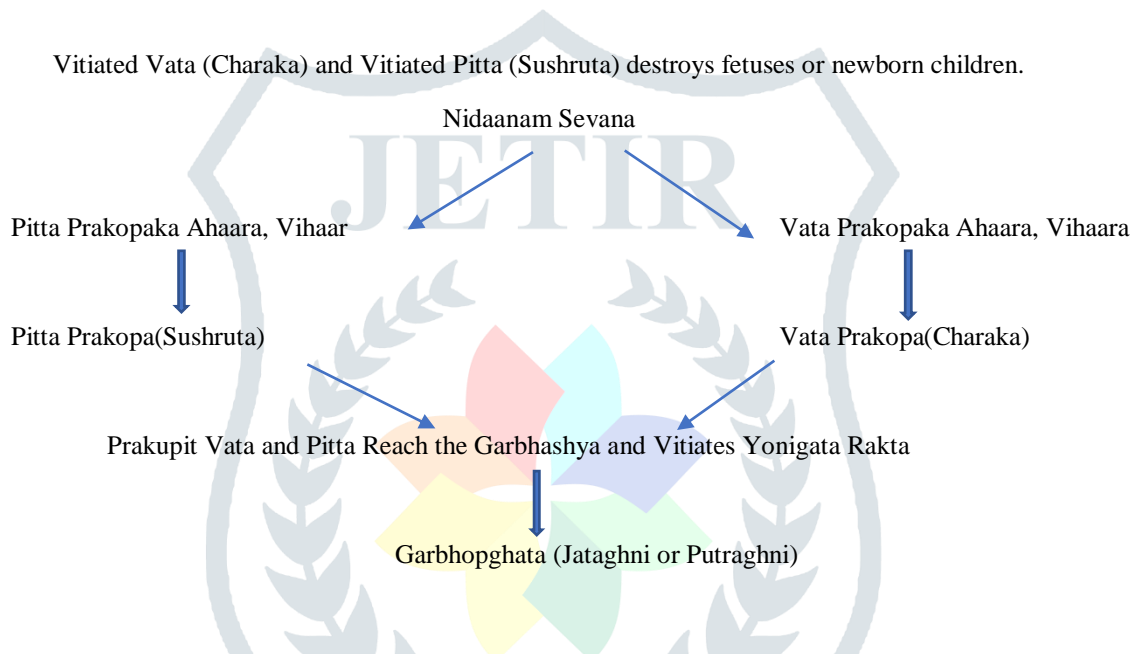
The symptom of Raktayoni is excessive menstrual bleeding²⁸

Asrja

Due to excessive use of ahara and vihara, which are capable of aggravating rakta and pitta, the rakta in the yoni gets vitiated by pitta. The vitiated rakta and pitta situated in the yoni will affect the woman even in garbhavastha and produce excessive bleeding during periods²⁹.

Jataghni / putraghni

It is a condition characterised by repeated abortions. Vata aggravates as a result of vata kopa nidanas, and this vata repeatedly destroys the fetuses born from vitiated rakta. Though both sexes are destroyed in this disease, the destruction of male fetuses predominates, hence the name putraghni³⁰. The fetuses, after attaining stability, are repeatedly destroyed due to bleeding and other features of vitiated pitta like burning and heat. When Vata becomes aggravated due to rookshata and repeatedly kills fetuses conceived and developed from vitiated artava, the condition is known as jataghni, according to Vagbhata³¹.



Vandhyata

Infertility is defined as the inability to conceive after one year of regular, unprotected coitus³². In Ayurveda, for conception and development of a healthy baby, four factors are essential. They are Ritu, Kshetra, Ambu, and Beeja. Ritu is a fertile period; kshetra is a healthy yoni (internal genital organs); ambu is proper nutrition; and bija is both sribija and pumbija. All these factors are needed for the conception and development of a healthy foetus³³.

Nidana

Yonipradosha, Mansika Rogas, Sukra Dushti, Artava Dushti, Aharadosha, viahara dosha, akalayoga (absence of contact at the time of fertile period) and balakshaya (abnormality of garbhasaya) have been explained as the causes of delay in achieving conception³⁴

Yonipradosha

Congenital or acquired disease of anatomic components of the reproductive system, i.e., the vagina, cervix, uterus, and fallopian tubes. All twenty Yonivyapada (gynecological disorders) that, if not treated properly, can lead to infertility, as well as Artavavaha Srotas Injury, lead to infertility.

Manasobhghata

Normal psychology of the couple is very important for the achievement of pregnancy. Fear of having sex, marital disharmony, and infrequent coitus affect fertility. Manasika Abhighata affects fertility. Due to stress, Bhaya, Shoka, Krodha, Lajja, etc., will be vitiated. So, it increases the hypothalamic activity of CRH (corticotrophin-releasing hormone), and further, it inhibits normal GnRH pulsatile secretion, and ultimately anovulatory cycles occur.

Shukra dushti: Quantitative and qualitative sperm abnormalities, as well as spermatocidal abnormalities. Infertility is caused by fluids. Pitruja Bhavas, which are classified into six factors, are carried to the embryo by sperm.

Artava dushti: The word Artava refers to ovum, menstrual blood, and ovarian hormone abnormalities. Infertility is caused by a lack of ovum and ovarian hormones.

Healthy sperm and ovum, and normal male and female genital organs, are essential for conception and the development of a healthy child.

Aharadosha: Dietetic abnormalities cause infertility in two ways:

1. By producing the loss of Dhatus and that of Dhatvagni, they influence hormones
2. By vitiating doshas, which cause various gynaecological disorders, leading to infertility.

Dietetic anomalies influence the nourishment of the body or cause the loss of Dhatus, which influences normal secretion of hormones.

Vihara Dosha: Abnormal modes of life and the suppression of natural urges aggravate doshas, which produce so-called yonivyapths, which lead to infertility. Other than the supine posture of the woman during coitus, the discharge of sperm on the Samirana Nadi or outside the vagina is considered a defective practice. In all these conditions Most likely, semen is not properly deposited inside the vaginal canal. Thus, sperm fail to enter the uterus. causing infertility. Abnormalities in lifestyle cause infertility in two ways:

1. By vitiating the doshas, they cause gynaecological disorders.
2. By preventing proper sperm entry due to faulty seminal ejaculation deposition.

Akala Yoga: The term "Kala" refers to both a time period and the rutukala. Conception does not occur in adolescent girls and old ladies due to the premenarche and menopause stages, respectively, or in coitus before or after Rutukala due to the absence and destruction of the ovum.

Bala Khsaya: Bala refers to the strength of garbhasaya, i.e., the uterus. A healthy pregnancy is critical for proper implantation and child development.

The classification of vandhya has not been explained by any of the acharyas except Harita. According to Harita, Vandhya can be divided into six types. Kakavandhya (inability to conceive after first childbirth), anapathya (primary infertility), garbhasravi (repeated abortions), mrtavalsa (repeated stillbirths), balakshaya, and garbhakosabhanga (injury to the uterus) ³⁵ In the description of Asrja Yonivyapath Acharya, Caraka has mentioned the word "apraja." Vandhya has been described as "nashtartava," and it may be considered due to the abnormality of the uterus or ovaries when secondary dysmenorrhoea or anovulation occurs, which leads to a condition of infertility. Taking all of these factors into consideration, vandhyata can be divided into three types:

1. Vandhya: absolute infertility
2. Apraja: primary infertility; a woman will conceive after treatment.
3. Sapraja: secondary infertility, the inability to conceive after giving birth to one or more children²⁹.

Conclusion

Uterine fibroid is seen during the reproductive life of a female, irrespective of age, and may result in various menstrual problems such as dysmenorrhoea, menorrhagia, and irregular periods by disturbing anatomical as well as physiological integrity. Uterine fibroid is classified as garbhasaya grandhi in Ayurveda. The treatment was aimed at reducing the fibroid. It is based on Ayurvedic principles. While considering the symptoms of fibroid, the treatment of yonirogas such as asrgdara or rakthayoni, jathaghni, vathiki, and vandhya can be adopted..

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