



Review Article

AYURVEDIC CONCEPT OF PREMENSTRUAL SYNDROME WITH SPECIAL REFERENCE TO
PITTA VRITTA VYANA VAYU

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ABSTRACT

Premenstrual Syndrome (PMS) refers to a complex of cyclical and recurrent physical, emotional and behavioral symptoms that occur specifically in luteal phase and remain for minimum three consecutive menstrual cycles. Up to 80% of women of child bearing age report with few mild symptoms of PMS prior to menstruation. But clinically significant PMS is seen only in 3 to 8% of women. Its more severe form, Premenstrual Dysphoric Disorder (PMDD) has listed one among the Depressive mental disorders by American Psychiatric Association. Premenstrual Syndrome, an often neglecting medical condition due to social taboo of not discussing the issue of menstruation, was not considered as a disease earlier due to unawareness of the grave symptoms of the disease. Till now, the disease is a medical mystery with unknown cause and without any specific proved diagnosis and medication in modern medicine. This article is merely an attempt to relate PMS with *Pittavritta Vyana Vata*, which is an *Avaranajanya Vyadhi*. In *Rituvyateetakala* which is compared mainly with the luteal phase, there is *Pittakopavastha* and *Vatasanchayavastha*. With excess intake of *Pittakar Nidan* in *Rituvyateetakala*, *Sanchita Vata* specifically *Vyana Vayu* gets *Avritta* with *Kupita Pitta* and manifested in the form of *Sarvanga Daha*, *Santapa*, *Klama* etc. So the disease PMS can be managed and treated on the line of *Pittavritta Vyana Vayu* so as to provide relief from its deleterious effects and improve her family and social life.

KEYWORDS: Ayurveda, *Pittavritta Vyana Vayu*, Premenstrual Syndrome, PMS, *Tridosha*.

INTRODUCTION

PMS is a recurrent and cyclical condition which is characterized by physical, psychological and behavioral changes of sufficient severity which result in deterioration of interpersonal relationships and normal activity. These group of symptoms often occur in luteal phase i.e. 7 to 10 days prior to menstruation and disappears when menstruation starts. PMS is a complex health concern. A lot of reproductive age women suffer from this syndrome. In modern era, women work throughout the month, no matter what. These multitasking modern women have learnt to ignore their natural rhythm, which causes hormonal swings leading to wide range of imbalances and complaints. PMS, which is termed as premenstrual syndrome, is one among these imbalances. It is just an abnormal response to normal hormonal changes. Untreated Premenstrual disorders can lead to modest increase in direct costs associated with increased medical visits and laboratory tests and large increase in indirect costs through lower work productivity^[1]. The diagnosis of PMS can also become difficult because many medical and psychological conditions can mimic or worsen symptoms of PMS^[2]. Further fate is that there is no proven medicine till date for this syndrome in Modern Medicine. Ayurvedic line of treatment defends a good deal on the stage of disease. It is considered not only a system of Medicine rather it is the way of life. Now Ayurveda is becoming more and more acceptable globally as it is eco-friendly with its holistic approach. It permits to treat the disease without nomenclature by judging the involvement of

Dosha Dushya only^[3]. This article is an attempt to understand the concept of PMS with *Avaranajanya Vyadhi*, *Pittavritta Vyana Vayu* in *Ayurveda* and devising appropriate measures to counter this menacing problem.

MATERIAL AND METHODS

- 1) Modern literature from books as well as websites related to PMS.
- 2) Ayurvedic Samhitas and other literature related to *Avarana* and *Vatavyadhi*.
- 3) Research Papers related to PMS.

Etiology

The definite cause of PMS which is also known as premenstrual tension (PMT)^[4], is unknown. Many theories have been postulated to explain the cause of PMS. According to some disapproved older theories, the causes of PMS are thought to be estrogen excess, estrogen withdrawal, progesterone deficiency, pyridoxine or vit. B6 deficiency^[5], alteration of glucose metabolism and fluid electrolyte imbalances.

Some current theories which explain PMS causes include-

A) Low endorphins in blood- Endorphins are feel good hormones, which contribute to the feeling of happiness and regulates mood. The level of this 'feel good' hormone drops during luteal phase of menstrual cycle. So it is possible that low beta endorphins lead to PMS symptoms^[6].

B) Serotonin deficiency- Serotonin is a chemical in brain that regulates many functions including mood and sensitivity to pain. In support of this theory, a role of serotonin in the pathophysiology of PMDD has been consistently shown in the research investigations using several experimental models. During the premenstrual phase, patients with PMDD have lower whole blood serotonin level^[7] and lower platelet serotonin uptake^[8] than controls without PMDD.

C) Nutritional cause- Magnesium and calcium deficiency have also been postulated as the cause of PMS because supplementation with these minerals have been shown to improve some PMS symptoms^[9].

D) Prostaglandins- Acc. to another theory, Prostaglandin which is an inflammatory substance, is produced in the areas where PMS symptoms originates like in breast, brain, reproductive tract, kidney and gastrointestinal tract, which may play a role in symptoms like cramping, breast tenderness, constipation or diarrhea^[10].

E) One theories under research include alteration in gamma-aminobutyric acid i.e. GABA system and hypoprolactinemia.^[11-13]

A genetic component has also been raised by some researchers.

Besides its etiology, there are some risk factors which have been identified to cause PMS. These are.

Smoking^[14]- According to a research, women who smoke cigarettes are likely to have more than twice as more severe PMS symptoms than non smoker women.

Obesity^[15]- Research reveals that women with Body mass index (BMI) of 30 or above are nearly three times as likely to have PMS than women who are not obese.

Dietary factors- Frequent consumption of fast food and excessive coffee intake.^[16]

Other than these, Stress, Advanced age, History of depression and Positive family history of PMS has also mentioned in texts as risk factor for PMS.

Epidemiology

Premenstrual Dysphoric disorder (PMDD), as defined by the American Psychiatric Association (APA) Diagnostic and Statistical Manual, Fifth Edition (DSM-5), can be differentiated from premenstrual syndrome (PMS) by the presence of at least one affective symptom, such as mood swings, irritability and/or depression^[17]. Symptoms of mild PMS have been reported to affect as many as 75% of women with no menstrual irregularity^[18]. Clinically significant PMS occurs in 3 to 8% of women^[19] while approximately 2% are affected severely, with PMDD.

Clinical Manifestations

Most of the women in their reproductive age, suffer from mild physical and/or psychological symptoms just two or three days prior to the onset of menstruation. These symptoms which do not cause functional impairment or severe distress to her, should not considered as Premenstrual syndrome (PMS)^[20]. PMS is defined by American College of Obstetricians and Gynecologists (ACOG) as at least one symptom associated with "economic or social dysfunction" that occurs during

the five days before the menstruation onset and should remain for minimum three consecutive menstrual cycles

Women suffering from PMS may experience symptoms of varying duration and severity from cycle to cycle. Common physical signs and symptoms include.

Cramps

Constipation or diarrhoea

weight gain

Bloating

Fatigue

Sleep disturbances

Breast tenderness

Acne

Change in appetite with overeating and cravings for food

Frequent psychological symptoms of PMS are-

Anger and irritability

Depression

Anxiety

Crying and oversensitivity

Exaggerated mood swings

Women with underlying depression often feel better during or after menstruation, but their symptoms do not resolve completely. On the other hand, women with PMS or PMDD have a complete resolution of symptoms when menstruation phase begins^[21].

Role of Ayurveda in PMS

PMS remains as enigma because of the wide ranging symptoms and the difficulty in making a firm diagnosis. There are several theories which have been postulated to explain the cause of PMS but till today, no one has been proven. Secondly, specific treatment for PMS still largely lacks a solid scientific basis. Widespread recognition of PMS has attracted a broad range of research interest in the treatment and management of the diverse symptoms of PMS. So *Ayurveda* can be considered as a boon in this challenging disease. Pacification of somatic symptoms along with improvement of psychomotor aspect of disease makes *Ayurveda* to be preferred choice in PMS.

Avarana

Concept of *Avarana* is one of the least understood concept among all fundamental principles of Ayurveda. According to *Ayurvediya Shabdakosha*, the word *Avarana* means *Avarodha*, *Gatirodha* i.e. obstruction in the normal *Gati* of *Vata*. *Vata*, which is strongest of all three *Doshas*, has *Laghu*, *Ruksha*, *Sheeta*, *Chala*, *Vishada*, *Khara* etc. *Guna*. It is due to *Chala guna* of *Vata* which is responsible for all the movements. If the *Gati* of *Vata* becomes obstructed, its functions will get hampered. *Acharya Sushruta* quoted three pathological conditions of *Vata*.

Kevala vata

Dosha yukta vata

Avritta vata

In case of *Avarana*, there are 2 components-one is *Avaraka dosha* which cause the *Avarana* or obstruction after getting vitiated, and other component is *Avritta dosha* which is getting *Avritta* or obstructed by *Avaraka dosha* and whose functions get affected by the obstruction. The

symptoms produced are based on the principle of *Karma Vridhhi* or *Karma hani* of *Avritta dosha* and secondarily the location of *Dosha dushya sammourchhana*. When there is complete obstruction or *Avarana*, *Karma hani* will be seen and when there is partial obstruction, *Karma* of the *Avritta dosha* gets vitiated so *Karma vridhhi* will be observed^[22]. Simultaneously, the symptoms of *Avritta dosha* may occur in any part of body depending upon the site of *Dosha dushya sammourchhana*. e.g. when we consider *Pittavritta Vyana Vayu*, when there is *Purna avarana* of *Pitta* to *Vyana Vayu*, *Gatra sanga* will be there and when *Anshika avarana*, *Gatra vikshepa* will be seen. As the *Sthana* or location of *Vyana Vayu* is *Sarva Sharira* so *Avarana* of *Pitta* to *Vyana Vayu* may take place anywhere in all over the body, depending upon *Srotas- Khavaigunyata* and accordingly treatment is done.

PMS in Ayurveda

According to *Ayurvedic* concept, the health of an individual is attributed to the status of *Doshas* in his body. The balanced state of *Doshas* is the cause of health while an imbalance of *Doshas* is termed as disease. In *Ayurveda*, there is no clear cut evidence of disease Premenstrual Syndrome so it is difficult to give the disease a single *Ayurvedic* term. It can be correlated with different entities which one explained either as symptoms or disease.

According to Acharya Charaka, in *Charaka Sutrasthana 18/44*, it is impossible to give the name to all the diseases so a learned physician should recognize the balanced or imbalanced state of *Doshas* in body and then treatment should be initiated after deciding the nature of disease. Taking all this into consideration, *Ayurvedic* concept of PMS has been made.

Symptoms of the Disease PMS is seen few days prior to menstruation in luteal phase which can be mentioned as *Rituvyateetakala* in *Ayurvedic* terminology. As in *Ayurvedic* concept of menstruation, *Artava* or *Ritu Chakra* is classified as *Ritukala*, *Rituvyateetakala* and *Rajakala*. There is a specific pattern of *Dosha dominance* during these three *Kala*^[23]. During *Rituvyateetakala*, there is dominance or *Kopa* of *Pitta Dosha* with *Vata Sanchayavastha*.

Phase	Ritukala	Rituvyateetakala	Rajahkala
Dosha sanchaya	Pitta	Vata	Kapha
Dosha Prakopa	Kapha	Pitta	Vata
Dosha shamana	Vata	Kapha	Pitta

Symptoms of *Pittavritta Vyana Vayu* as mentioned by Acharya Charaka are.

Daha Sarvanga

Klama

Gatra vikshepa sanga

Santapa

Vedana

In *Rituvyateetakala*, already *Pitta* remains in *Kupitavastha*; and when *Pittavardhaka nidan sevana* is done by any women specifically during this *Kala*, there is exponentially rise in *Pitta* quantitatively. This excessive *Kupita Pitta* blocks the normal path of *Vata* specifically *Vyana Vata*. *Vyan vayu* is responsible for all *Gati, Prasarana, Aakunchana, Utkshepa, Avakshepa, Nimesh unmesha adi kriya*, leading to manifestations of *Pittavritta Vyana vayu* like *Sarvanga daha, Klama* etc., Thus Both *Pitta* and *Vyana vayu* in turn leads to *Avaraka* and *Avritta* components of *Avarana* respectively. As the *Rituvyateetakala* ends and *Rajakala* begins; *Pitta*, which is in aggravated state and was acting as *Avaraka dosha*, automatically comes back to its *Shaman* state so pacifies the symptoms of *Pittavritta Vyana Vayu* or PMS. Simultaneously, in PMS or PMDD, due to genetic predisposition, risk factors like cigarette smoking, stress, junk food (which is common in today's working women), there in imbalance of various hormones including estrogen and progesterone. This cyclical fluctuation in circulating estrogen and progesterone cause marked change in neurotransmitters like Opioid^[24], GABA^[25] and serotonin^[26] system which manifests in the form of PMS.

Pittavritta Vyana Vayu

Pittavardhaka ahara, Vihara
(spec. in *Rituvyateetakala*)



Pitta prakupita avastha



Hamper the normal *Gati* of *Vata*,

Acts as *Avaraka Dosha*



Termed as *Pitta avritta Vyana Vayu*

PMS, PMDD

Genetic predisposition, stress, risk factors like cigarette smoking, junk food



Imbalance of various hormones like Estrogen and progesterone



Cause marked change in neurotransmitters like GABA, serotonin



Manifests as PMS, PMDD

Table 1: Symptoms of PMS in correlation to Pittavritta Vyana Vayu

Pittavritta vyanavayu	Premenstrual syndrome
<i>Sarvanga Daha</i>	Hot flushes
<i>Klama</i>	Exhaustion, tiredness without any work
<i>Gatra vikshepa sanga</i>	Luteal pattern of Catamenial epilepsy (seizure exacerbation that aligns with luteal phase of menstrual cycle (usually not in PMS))
<i>Santapa -Deha, Indriya manas</i>	Raised temperature of body Mood and behavioral disorders irritability, anxiety, emotional up
<i>Vedana</i>	Cramps in abdomen, Pain in breast, generalized aches

Pittavritta Vyana Vayu can be managed on the line of *Avarana Chikitsa*. Acharya Charaka has mentioned the treatment of *Pittavritta Vyana Vayu* in *Vatavyadhi Chikitsadhyaya. Nidana Parivarjan*, the 1st line of treatment should be done by avoiding *Pittavardhaka ahara, Vihara*. The management of *Avarana* should aim towards cleansing the *Srotas* with different medications, *Vatanulomana*^[27] along with *Panchkarma* therapy. The selection of specific *Panchkarma* is done to remove of *Avaraka Dosha*, i.e. *Pitta*. So when *Pitta* is obstructing *Vyana Vayu*, then *Pitta Avarana* removal management should be done. *Virechana* with *Eranda taila* can be a choice of drug in this disease. Depending upon the *Anupana*, *Eranda Taila* removes various *Avarana* e.g. when administered with *Mansa rasa* and *Yusha*, it mitigates *Vata*, when administered with milk, mitigates *Pitta* and when it is administered with *Gomutra*, it mitigates *Avarana* of *Kapha dosha*. So in all type of *Avarana*, *Eranda taila* can be used accordingly. *Yapana Basti* can be given as it is choice of treatment in majority of *Avarana* due to its *Tridosahara* property. It can be given at any time, in any season and is devoid of any complication. Other than this, *Manjisthadi ksheera Basti*, *Madhuyasthi ksheera Basti*, *Guduchyadi ksheera Basti*, *Pichha Basti* may be considered for the management. In *Nasya chikitsa*, *Ksheera nasya* can be administered. Besides this, other *Panchkarma* procedures can be used depending upon the location of *Doshadushya sammurchhana*. *Rasayana* drugs with *Madhura rasa* (which pacifies *Vata* as well as *Pitta*) e.g. *Bala*, *Goghrita*, *Shatavari*, *Draksha*, *Kharjoor*, *Madhuyasthi*, *Madhura Trifla* can be used internally. Yogic exercises like *Pranayama*, *Bhramri*, *Sheetali* etc. can be practiced to reduce the psychosomatic manifestation of the disease.

CONCLUSION

Throughout most of the history, there has been a certain amount of taboo involved in the discussion of the female menstrual cycle. During the cycle, hormonal fluctuation happens within the body which may lead to various annoying symptoms. This recurrent complex of physical, psychological and behavioral symptoms which is termed as Premenstrual Syndrome, affects large population of females. Many of them do not like to disclose such complaints to anybody due to which several of them left undiagnosed and if left untreated, it affects her social life as well as family life. So they should be diagnosed and treated properly. PMS is not known by a single name in Ayurveda so according to its symptoms and phase of occurrence of symptoms, the disease can be related to *Pittavritta Vyana Vata*. Though an effective cause and so the effective treatment has not yet been found for PMS in

Modern Medicine, Ayurveda can offer a great benefit to the female population by improving her psychosocial as well as physical health which ultimately contributes to a healthy society.

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