

**MODE OF ACTION OF SHATAVARI (ASPARAGUS RACEMOSUS) IN
PRE-MENSTRUAL SYNDROME****Dr. Archi Mangain*¹, Dr. Sumarani Rajesh.², Dr. Asokan V.³**¹3rd Year PG Scholar²Professor, Department of Prasuti Tantra and Stree Roga³Professor and HOD, Department of Prasuti Tantra and Stree RogaDepartment of Prasuti-Tantra and Stree-Roga, Alva's Ayurvedic Medical College,
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ABSTRACT

The reproductive years of many women are marked by distress due to premenstrual symptoms. Pre-menstrual Syndrome (PMS) has emerged as a 21st century phenomenon, which is prevalent in women of all ages causing substantial morbidity with detrimental effects on social, emotional well being, work performance, interpersonal relationships and overall quality of life. In Ayurveda PMS symptoms are seen in *rituvyateeta kaala* and can be correlated with *pitta pradhana- vata sanchaya avastha*. *Shatavari* drug due to its pharmacodynamic profile; its *madhura* and *tikta rasa*, *guru* and *snigdha guna*; *medhya*, *rasayana*, *rakta-pittashamaka*, *mutrala* and *vedanastapana* properties, can help in reducing the symptoms of PMS. In this article an effort has been made to explore the probable mode of action of *shatavari* in PMS.

KEYWORDS: Ayurveda, Premenstrual Syndrome, *Shatavari Churna*.**INTRODUCTION**

Pre-Menstrual Syndrome (PMS): Premenstrual syndrome or PMS is a psycho-neuro-endocrine disorder consisting of a constellation of mood, behavioural and /or physical symptoms, that have a regular clinical relationship to the luteal phase of menstrual cycle. A cross sectional survey in India showed that 91.4% participants had atleast one symptom of any given severity (mild to severe) in half or more cycles during last one year.

Epidemiological surveys have estimated that frequency of PMS is 80-90%, with impairment in functioning.

Oxford dictionary describes Premenstrual syndrome as - any of a complex of symptoms (including emotional tension and fluid retention) experienced by some women in the days immediately before menstruation. Its aetiology is yet not known, their prevalence varies widely across different cultural groups.

Pathophysiology: The exact cause is not known but many hypothesis are postulated which include:

Role of gonadal hormones, neuroendocrine factors like serotonin and endorphins, psychological and psychosocial factors, role of immune system etc.

Symptoms: Physical, emotional, behavioural, cognitive and various other symptoms are attributed to PMS. Some common symptoms include:

1. Physical symptoms- also called as somatic symptoms, occur due to emotional distress, in the absence of any medical illness eg, headache, bloating, weight gain, breast tenderness etc.
2. Emotional symptoms- either due to an external environmental stimulus or can come from within the individual. These include depression, irritability, fear, anger, anxiety happiness etc.
3. Behavioural Symptoms- are those which are differ from the existing social values, norms, culture and age related behaviour. These include social withdrawal, overeating, reduced sleep and decreased interest in day-to-day activities.
4. Cognitive symptoms- the mental process of comprehending or understanding or gaining knowledge is called as cognition. Some of these are memory problems, confusion, poor judgement and difficulty in concentrating.

Ayurveda correlation: The disease PMS has no singular term in Ayurveda, so it is difficult to correlate with a single disease entity. Ayurveda defined menstrual cycle as *rituchakra*, mainly comprising three phases *raja kala*, *ritu kala* and *ritu vyateeta kala*. There is a specific pattern of *dosha* dominance during these three *kala*. Symptoms of PMS is seen few days prior to menstruation in luteal phase, which is considered as *ritu vyateeta kala*.

SHATAVARI: *Shatavari* is a *rasayana* drug and it is widely accepted as a female rejuvenative. Since hundreds of years, *shatavari* has been used for menstrual abnormalities (*pushpakari*), as *vrishya*, and as *prajakari*.

Pre-menstrual syndrome is *pitta padhana* and *vata sanchaya avastha*. According to a few theories, it is also caused due to falling levels of oestrogen in the luteal phase. The drug *shatavari* has both actions- it has *vata-pitta shamaka* properties to counteract the *dosha* imbalance as well as phytoestrogens to balance the oestrogen level.

Taxonomical classification

Kingdom : Plant kingdom

Division : Phenerogames

Sub-Division: Angiosperms

Class : Monocotyledons

Series: Coronarieae

Natural order: Liliaceae

Genus : *Asparagus*

Species : *Racemosus willd*

Rasa Panchaka

Rasa : Tikta, Madhura

Guna: Guru, Snigdha

Virya: Sheeta

Vipaka: Madhura

Prabhava: Rasayana

Shatavari churna is a single drug preparation taken for the treatment, with *ksheera* as *anupana*. Previous research work done on *shatavari* shows positive effect in the women having symptoms of anxiety, irritability, depression and sleep disturbance. It has *madhura* and *tikta rasa*, *guru* and *snigdha guna* and *medya*, *rasayana*, *rakta-pittashamaka*, *mutrala* and *vedanastapaka* properties etc.

PROBABLE MODE OF ACTION OF SHATAVARI CHURNA**Based on rasa panchaka-**

Rasa: Shatavari has *madhura* and *tikta rasa*. *Madhura Rasa* is congenial to the body (*sharira satmaya*), improves *ojas*, is *indriya prasadana*, soothes all the sense organs and mind (*akshaprasadan*), and improves strength (*balakrita*).

The *madhura rasa* and *snigdha guna* acts as *vata-pittashamaka* and reduce the symptoms like irritability, anger and tension.

Tikta rasa is digestive (*rochana, deepana*), and pacifies *kapha dosha*, which decreases the symptoms like depressed mood.

Guna- Shatavari has *guru, hima* and *snigdha guna*, which pacify the *vata* and *pitta dosha*.

Virya- *Sheeta virya* pacifies *pitta dosha*.

Vipaka- *Madhura vipaka* pacifies *vata dosha*.

Based on Karma: *Vedanasthapana, shoolahara karma* relieves abdominal cramps, pelvic pain, headache and generalised aches.

Medhya karma of *shatavari* works on psychological and behavioural symptoms.

Rakta-pitta-shamaka properties act on skin changes, rashes, pimples

Rasayana, balya karma help overall PMS symptoms.

Nadibaladayaka karma relieves the pains, aches during PMS.

Grahi karma corrects bowel activity.

Based on Pharmacodynamic Profile: Antioxidant, anti-inflammatory -improves overall PMS.

Estrogenic- flavonoids show phytoestrogenic properties, so it has overall effect on PMS by balancing the oestrogen level in the body.

Anti-stress activity- exerted an inhibitory effect on pro-inflammatory cytokines, which showed improvement in behavioural symptoms.

Sarsapogenin -used in the treatment of depression which relieves the symptoms like depressed mood, sensitivity, hopelessness.

Adaptogenic activity- effect is mediated through serotonergic and noradrenergic systems, which improve mood and behaviour.

Hyperoside- chemical constituent used to treat anxiety, sleep disorder.

Acts as analgesic- reduces pain, abdominal cramps.

Previous work done on Premenstrual Syndrome

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2. Management Of Pre Menstrual Syndrome With Combined Ayurveda Interventions (*Ashwagandha Vati* And *Satvavajaya Chikitsa*) - An Open Label Single Arm Clinical Study by Shrilata, Manjunatha Adiga, Sanath Kumar T.
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4. Effect of Punarnavadi Guggulu in the management of Premenstrual Syndrome- A Single Case Study by Rathod M and Karkare M.

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