

AN UNDERSTANDING AND COMPREHENSIVE APPROACH TOWARDS PERIMENOPAUSAL STRESS – A REVIEW

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ABSTRACT

Stress is body's way of responding to any kind of demand or threat. Stress is different from anxiety. Mainly Hypothalamus - pituitary - adrenal glands are responsible for mechanism and effects of stress. Stress can be there because of any happening in life. Menopause is life changing event that every woman experiences. Perimenopause is the period before, during and after menopause. Because of the hormonal changes in body, woman undergoes many stressful transforms. Empty nest syndrome may aggravate the stress in perimenopause. Perimenopausal stress can be managed by use of different Aushadhi, Ahara and Vihara.

KEYWORDS: Perimenopause, perimenopausal stress, Ayurveda, Rajonivrutti, menopause

INTRODUCTION

Stress is often described as a feeling of being overloaded, wound up tight, tense and worried¹. Stress is body's way of responding to any kind of demand or threat. When person senses danger² whether it's real or imagined—the body's defenses kick into high gear in a rapid, automatic process known as the “fight or flight” reaction, or the stress response.

Physiological or biological stress is an organism's response to a stressor such as an environmental condition³. Stress is a body's method of reacting to a challenge. Stimuli that alter an organism's environment are responded by multiple systems in the body. The autonomic nervous system and HPA axis are two major systems that respond to stress. The sympatho-adrenal-medullary

(SAM) axis may activate the fight or flight response through the Sympathetic nervous system, which dedicates energy to more relevant bodily systems to acute adaption to stress, while the parasympathetic nervous system returns the body to homeostasis. The second major physiological stress system, the hypothalamic-pituitary-adrenal (HPA) axis regulates the release of cortisol, which influences many bodily functions such as metabolic, psychological and immunological functions. The SAM and HPA axes are regulated by a wide variety of brain regions, including the limbic system, prefrontal cortex, amygdala, hypothalamus, and stria terminalis⁴.

Common causes of stress⁵ -

External causes of stress	Internal causes of stress	Top stressful life events
<ul style="list-style-type: none"> • Major life changes • Work or school • Relationship difficulties • Financial problems • Being too busy • Children and family 	<ul style="list-style-type: none"> • Pessimism • Inability to accept uncertainty • Rigid thinking, lack of flexibility • Negative self-talk • Unrealistic expectations / perfectionism • All or nothing attitude 	<ul style="list-style-type: none"> • Death of a spouse • Divorce • Marriage separation • Imprisonment • Death of a close family member • Injury or illness • Marriage • Job loss • Retirement

Types of stress -

Stress can be categorized into 3 or 7 types -

Three types of stress are⁶ -

1. Acute stress - Sometimes stress can be brief, and specific to the demands and pressures of a particular situation, such as a deadline, a performance or facing up to a difficult challenge or traumatic event. This type of stress often gets called acute stress.
2. Episodic acute stress - Some people seem to experience acute stress over and over. This is sometimes referred to as episodic acute stress. Some people tend to worry endlessly about bad things that could happen, are frequently in a rush and impatient with too many demands on their time, which can contribute to episodic acute stress.
3. Chronic stress - The third type of stress is called chronic stress. This involves ongoing demands, pressures and worries that seem to go on forever, with little hope of letting up. Chronic stress is very harmful to people's health and happiness. Even though people can sometimes get used to chronic stress, and may feel they do not notice it so much,

it continues to wear people down and has a negative effect on their relationships and health.

Seven types of stress are⁷ -

1. Physical: intense exertion, manual labor, lack of sleep, travel
2. Chemical: drugs, alcohol, caffeine, nicotine and environmental pollutants such as Cleaning chemicals or pesticides
3. Mental: perfectionism, worry, anxiety, long work hours
4. Emotional: anger, guilt, loneliness, sadness, fear
5. Nutritional: food allergies, vitamin and mineral deficiency
6. Traumatic: injuries or burns, surgery, illness, infections, extreme temperatures
7. Psycho-spiritual: troubled relationships, financial or career pressures, challenges With life goals, spiritual alignment and general state of happiness

Signs and symptoms of stress⁸ -

Health problems caused or exacerbated by stress can be categorized as following:

1. Depression and anxiety
2. Pain of any kind
3. Sleep problems

- 4. Autoimmune diseases
- 5. Digestive problems
- 6. Skin conditions, such as eczema
- 7. Heart disease
- 8. Weight problems
- 9. Reproductive issues
- 10. Thinking and memory problems

Cognitive symptoms	Emotional symptoms	Physical symptoms	Behavioral symptoms
<ul style="list-style-type: none"> • Memory problems • Inability to concentrate • Poor judgment • Seeing only the negative • Anxious or racing thoughts • Constant worrying 	<ul style="list-style-type: none"> • Depression or general unhappiness • Anxiety and agitation • Moodiness, irritability, or anger • Feeling overwhelmed • Loneliness and isolation • Other mental or emotional health problems 	<ul style="list-style-type: none"> • Aches and pains • Diarrhea or constipation • Nausea, dizziness • Chest pain, rapid heart rate • Loss of sex drive • Frequent colds or flu 	<ul style="list-style-type: none"> • Eating more or less • Sleeping too much or too little • Withdrawing from others • Procrastinating or neglecting responsibilities • Using alcohol, cigarettes, or drugs to relax • Nervous habits (e.g. nail biting, pacing)

Perimenopause -

The Greek prefix “peri” means around. Perimenopause literally means “around the time of menopause.”⁹ Menopause occurs once a woman has gone twelve consecutive months without a menstrual period. Until that time, she is in perimenopause, experiencing the hormonal changes that bring about actual menopause.

Perimenopause or menopausal transition, is a defined period of time beginning with the onset of irregular menstrual cycles until the last menstrual period, and is marked by fluctuations in reproductive hormones. Medically, it starts when the first menopausal symptoms are noticed and ends a year after the last menstrual bleed or the point in time when menopause has been reached.

Menopause is defined retrospectively as the time of the final menstrual period, followed by 12 months of amenorrhea. Post-menopause describes the period following the final menses¹⁰.

During the perimenopause phase, a woman’s body is producing less progesterone with each passing year. In addition, her estrogen levels are rising and falling erratically as well. These hormonal changes bring about great physical and emotional discomfort for many women and can last anywhere from five to ten years or more.

Cortisol - progesterone - estrogen and stress¹¹ -

During menopause, the adrenal glands take over some of the work of the diminishing ovaries, and produce small amounts of progesterone and estrogen. When we experience stress, the body becomes primed

for attack, and the adrenal glands choose to produce cortisol and adrenaline over the production of oestrogen and progesterone. When we are experiencing chronic stress, it forces the adrenal glands to sustain high levels of cortisol.

Progesterone and estrogen work against the impact cortisol has on body. Body can buffer stress before menopause, because we have optimal levels of progesterone. Once those levels start to lower during perimenopause, the cortisol buffering effect weakens. High cortisol levels can also decrease progesterone's impact on the body.

Empty nest syndrome¹² -

Perimenopause can be associated with empty nest syndrome. Empty nest syndrome is a feeling of grief and loneliness parents may feel when their children leave home for the first time, such as to live on their own or to attend a college or university. It is not a clinical condition.

Symptoms of perimenopause -

Perimenopause symptoms vary among women not only in intensity, but in the types of symptoms as well. While each woman's experience is different and unique to her, there are many symptoms that are relatively common, such as¹³:

- Insomnia
- Low energy, even if getting adequate sleep
- Frequent colds
- Cravings for unhealthy foods
- Digestion problems like bloating
- Weight gain, especially around the middle
- Low sex drive
- More aches and pains
- Low mood

- Irritability
- Rage
- Feeling overwhelmed
- Feeling revved
- Depression
- Anxiety
- Mood swings
- Reduced self-esteem
- Hot flashes & night sweats
- Insomnia
- Fatigue
- Crying easily
- Shorter cycles, closer together
- Heavy bleeding with blood clots

Perimenopause: in Ayurveda pint of view

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As seen earlier, Perimenopause is time around menopause. According to Ayurveda, menopause is considered as Rajonivrutti. Certain factors should be considered in case of Rajonivrutti. Like -

Rajonivrutti Kala - 50 years of age²².

Causes for Rajonivrutti¹⁴ - Kala, Swabhava, Vayu, Karma or environment, Dhatukshaya, Abhighata etc are the causes of Rajonivrutti.

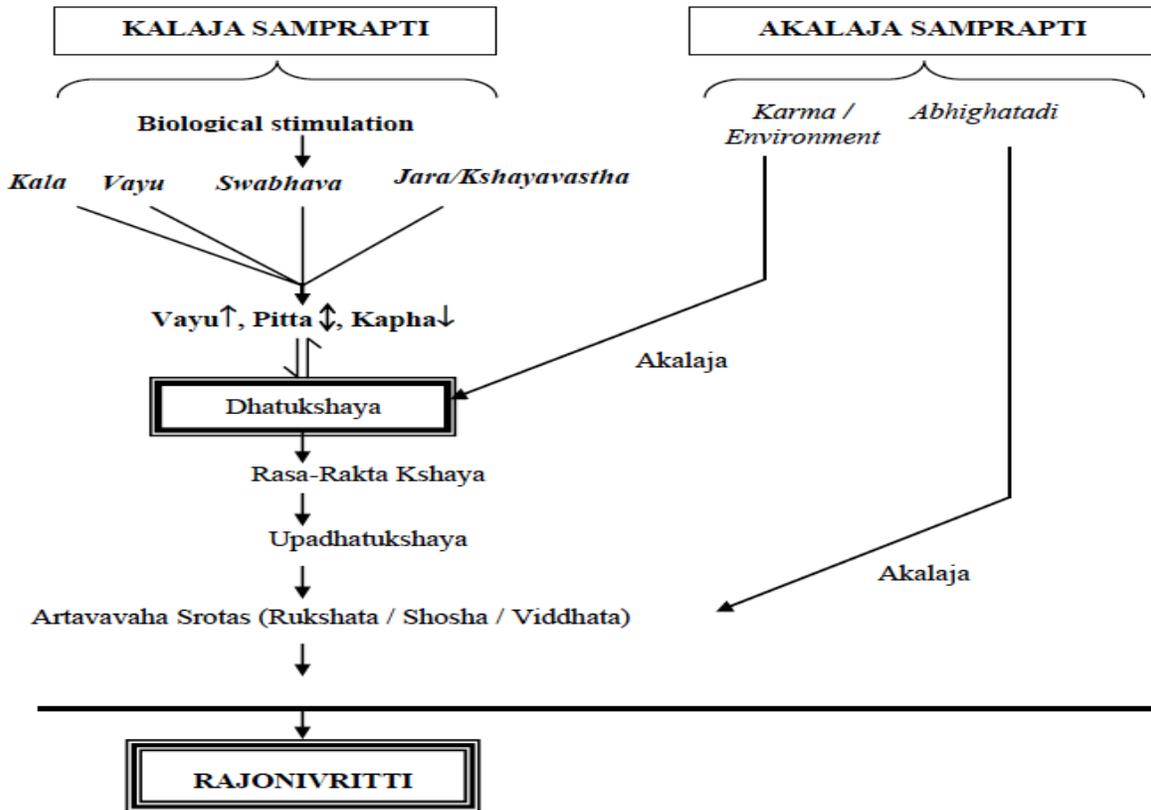
Types of Rajonivrutti¹⁴- Rajonivrutti also can be divided into two types.

1) Kalaja Rajonivrutti :- If Rojonivrutti occurs at its probable age (i.e. around 50 years of age) it is called as Kalaja Ronivriti. According to Acharya Sushruta the timely Rajonivrutti (i.e. natural diseases like aging) occurs only when the protective measurements of healthcare are practiced. This condition is Yapya by Rasayana etc.

2) Akalaja Rajonivrutti: - If Rajonivrutti occurs before or after its probable age (i.e. around 50 years) it is termed as Akalaja Rajonivrutti. Akalaja Rajonivrutti take place

due to absence of the protective measurements of health care. In this type of Rajonivritti, symptoms are very acute and

medical attention should be given to avoid its hazardous effects.



Doshaja Lakshana -

Lakshana of Rajonivritti¹⁴ -

Vataja Lakshana	Pittaja Lakshana	Kaphaja Lakshana
<ul style="list-style-type: none"> • Shirah Shula • Hrid Spandanadhikya • Hasta-Pada Supti • Shabda Asahisnuta • Bala Kshaya • Adhmana • Atopa • Vibandha • Anidra / Alpanidra • Bhrama • Katishula • Sandhi Vedana 	<ul style="list-style-type: none"> • Ushnanubhuti • Daha • Swedadhikyata • Ratrisweda • Trisha • Mutradaha • Glani • Yonidaha 	<ul style="list-style-type: none"> • Hrid dravatva • Bhrama • Raukshaya • Angamarda

Dhatukshayajanya Lakshana¹⁵ -

Rasa Kshaya	Shabdasahatva, Hriddravatva, Shula, Shrama, Shosha, Trisha
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Rakta Kshaya	Twaka rukshata, Sira shaithilya
Mansa Kshaya	Sphik-Gandadi, Shushkata, Toda, Rukshata, Glani, Sandhisphutana, Sandhi Vedana, Dhamani Shaithilya
Meda Kshaya	Anga Rukshata (i.e. vaginal dryness), Shrama, Shosha, Krushata
Asthi Kshaya	Asthitoda, Danta-Nakha-Kesha-Roma (Rukshata /Shatana), Sandhishaithilya
Majja Kshaya	Asthi Saushirya, Asthi toda, Daurbalya, Bhrama, Tamodarshana
Shukra Kshaya	Yoni vedana, Shrama, Daurbalya, Panduta

Manas Lakshana - Krodha, Shoka, Bhaya, Dwesha, Smriti, harsha, Utsaha hani, Dairya Hani, Shirah Shula, Vishada, Chinta, Medhahras, Alpa Harsha and Priti, Parakrama hani

Remedies for perimenopause -

Stress of perimenopause can be overcome with the help of -

- Aushadhi - medicines
- Ahara - food
- Vihara - activities

Aushadhi for relieving stress of perimenopause -

In modern science view, doctors will be reluctant to use prescription medicines for

the perimenopausal¹⁶. However, if symptoms are severe and starting to interfere with quality of life, a number of classes of medicine may be suggested. Hormonal treatments include the lowdose oral contraceptive to treat PMS like symptoms, or HRT (hormone replacement therapy). In addition, antidepressants or sedatives may be needed for those suffering depression, anxiety or insomnia.

According to Ayurveda, treatment varies according to symptoms produced due to vitiation of Dosha - Vata, Pitta and Kapha¹⁷.

Vata Dosha	Pitta Dosha	Kapha Dosha
Ashwagandha (<i>Withania somnifera</i>), Arjuna (<i>Terminalia arjuna</i>), Cardamom (<i>Elettaria cardamom</i>), Garlic (<i>Allium sativum</i>), Guggul (<i>Commiphora mukul</i>), Sandalwood (<i>Santalum alba</i>) and Ziziphus (<i>ziziphus jujube</i>)	Aloevera, Arjuna (<i>Terminalia ar-juna</i>), Amla (<i>Emblica officinalis</i>), Saffron (<i>crocus sativus</i>), Sandalwood and Use spices such as cinnamon, cardamom and fennel.	Cinnamon, Guggul (<i>Commiphora mukul</i>), Mustard (<i>Brassica nigra</i>), Haritki (<i>Terminalia chebula</i>), Nagarmotha (<i>Cyperus rotundus</i>)

Ahara for relieving stress of perimenopause -

Good quality protein, meat / fish / eggs / pulses should be consumed. Move away from processed, pre-packaged foods

and return to more wholesome, home-made foods¹⁸.

On the basis of vitiation of Dosha, following things can be advised¹⁹ -

Vata Dosha	Pitta Dosha	Kapha Dosha
Increase warm food and	Increase cooling foods, water	Prefer light, dry and warm

drinks, regular meals, and use spices such as fennel and cumin. Decrease caffeine and other stimulants, refined sugar, cold drinks, salads.	intake, sweet juicy fruits (grapes, pears, plums, mango, melons, apples,) zucchini, yellow squash, cucumber, organic foods. Use spices such as cinnamon, cardamom and fennel. Avoid hot spicy foods, hot drinks and alcohol	food, Consume fruits, whole grains, legumes, vegetables. Use spices such as black pepper, turmeric and ginger. Avoid meat, cheese, sugar, cold foods and drinks. Weekly fasting is helpful. Most or all of the daily food should be consumed before 6 p.m.
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Vihara for relieving stress of perimenopause -

- Deep breathing exercise
- Relaxation / Meditation
- Walking
- Exercising right²⁰ - The human body loves to move, so move it any way you like: dance, swim, walk, run, yoga, Pilates, or aerobics.
- Journal¹⁶ - Writing down how you are feeling can be a good way of off-loading information.

- Yogasana - Sarvangasana, Bhujangasana, Bhadrasana, Vajrasana can be opt for perimenopause.
- Spending good time with family members
- Sharing feelings with friends
- Engaging ourselves in different interesting activities or hobbies

Depending upon Dosha predominance, following things can be advised²¹ -

Vata Dosha	Pitta Dosha	Kapha Dosha
Early bedtime, oil massage using almond and olive oil, meditation, yoga, Regular exercise like walking	Oil massage using coconut and sesame oil. Use Meditation and other techniques to reduce anger, hatred and resentment. Exercise and exposure to the sun are limited.	Get up early. Mustard oil and linseed oil are often recommended for massage.

DISCUSSION

Perimenopause and stress are not directly mentioned in Ayurvedic text. Stress can be correlated with ‘Chintyanam Atichintanat’ Hetu wich is described as Rasavaha Srotas Dushti Hetu by Acharya Charak²³. Rasa Dhatu gets vitiated by stress and there by all Sharira Bhava gets affected. As Artava is Upadhatu of Rasa Dhatu, stress ultimately affects it.

At the age of perimenopause, many factors contribute to imbalance of Sharira and Manas. During perimenopause, there is imbalance between Dosha. Vata, Pitta and Kapha are responsible for health as well as diseased state of body. Depending upon Hetu sevana and other predisposing factors, variety of Lakshana can be observed during perimenopause. Consequently, treatment

varies depending upon which Dosha is vitiated.

CONCLUSION

Perimenopause is inevitable event in every woman's life. With the help of Aushadhi, Ahara and Vihara one can diminish the ill effects of perimenopausal stress.

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Source of support: Nil,

Conflict of interest: None Declared

Cite this article as

Neha Dattatraya Gadgil : An Understanding and Comprehensive Approach towards Perimenopausal Stress – A Review; ayurpub; IV(1): 1201-1209