"A Conceptual Study - Menopausal Syndrome from Ayurveda Perspective"

Dr. Kuwar Rekha Chhagan¹, Dr. Gaikwad Rutuja Sandip²,
Dr. Chaudhari Saudamini S³

¹²Assistant Professor-Streeroga & Prasutitantra Dept, R. A. Podar Medical College, Worli, Mumbai
³Professor & HOD-Streeroga & Prasutitantra Dept, R. A. Podar Medical College, Worli, Mumbai

Abstract: Menopause or Rajonivrutti as it is called in Sanskrit, is one of the most significant milestones in a woman's life. If youth the spring season of our life, then menopause is like autumn. Natural menopause is an age related decline in endocrine function of ovaries due to exhaustion of follicle pool. A woman enters in peri-menopausal age around 45-47 years. Natural menopause occurs at or after 40. The life expectancy in women has increased to around 78 years an average. Therefore, the post-menopausal population today forms a large section, which requires medical care for their various symptoms. In this article concept of Rajonivrutti (Menopausal Syndrome) and Ayurvedic therapies (Rasayana), which are useful described.

Keywords: Menopausal Syndrome, Rajonivrutti, Rasayana, HRT

I. Introduction

Cessation of menstrual cycles and end of reproductive phase of life are not the only highlights of menopause. It also has equally strong before and after math which influence women’s health for their lifetime. Rajonivritti is not described separately as a pathological condition or severe health problem in Ayurvedic classics. The ancient Acharya’s termed it as a normal physiology.

Etiology-
The term 'Rajonivritti' is made up of two different words viz. "Rajah" and "Nivritti".

Rajah -
According to Sanskrit language the root word for "Rajah" is given, which means to give color to the substance. The word Rajah is used synonymously for various substances like,
• Artava or Stripushpa (Menstrual blood)
• Raja Guna (A type of Manas dosha)
• Parag (Pollen grains of flower)
• Renu (Minute dust particles)
• Synonym of a plant named Parpata

Here, in the context of this subject, the meanings of Rajah like Artava and Stripushpa.

Nivritti -
Hemchandra have coated the synonyms of the word "Nivritti" like Apravritti, Uparama, Virati, Vyparati and Uparati. Meaning of these all words can be summarized as below. Accomplishment, Fulfillment Completion, End Discontinuance of the influence of one rule over another Resulting Ceasing, Desisting, Abstaining form Inactivity.

In the present context, the meaning of Nivritti is understood as end or ceasing. Thus, the whole term Rajonivritti means end of Artava Pravritti or Cessation of Menstruation.

Rajonivritti Kala-
Rajonivritтикala is mentioned by almost all Acharyas without any controversy, few direct reference regarding the age of menopause, Acharya Sushruta said that menarche occur at the age of 12 years and due to the effect of aging menopause occur at the of 50 years (Sushrut Sharirsthana 3/9)¹¹. Vagbhata and Bhavamishra mentioned the same age for Menarch and Menopause.

Nidana of Rajonivritti -
As it is already mentioned that Rajonivritti is not described in the classics as a separate disease there is no information available regarding its Nidana, Purvarupa, Rupa, Samprapti. To understand this condition as a disease, certain basic principles have to be considered here.
Concentrating on the probable Nidanas (Etiological factors) regarding the condition Rajonivritti, few factors can
be squeezed out. Some of these factors are mentioned by Acharyas in the context of "Rajah Utpatti hetus" too. These factors can be considered as Rajah Nivritti hetus also. Besides this, some very specific factors also can be considered as the causative factors for Rajonivritti which all are enlisted below.

- Kala
- Vayu (Apan and Vyan)
- Dhatukshaya
- Swabhava
- Karma or Environment
- Rajastrav

Types of Rajonivritti -
Ayurvedic science has divided all diseases into four major types. Agantu, Sharira, Manas and Swabhavika (Sushrut Sutrasthana 1/24)\textsuperscript{[1]}

Concentrating on 'Swabhavika' type; it is described that this type includes all those conditions, which are naturally occurring. Acharya Sushruta has mentioned a group of naturally occurring diseases under the heading of Swabhavabala Pravritta includes Kshudha (Hunger), Pipasa (Thirst), Nidra (Sleep), Jara (Aging) and Mrityu (Death) (Sushrut Sutrasthana 1/24 & 28/8)\textsuperscript{[1]}.

Although these diseases are naturally occurring diseases, but sometimes they are being acquired also, which is described as "Doshaja". So, they are further divided into two types, Kalakrita and Akalakrita (Sushrut Sutrasthana 24/8)\textsuperscript{[1]}.

In some manner, Rajonivritti too is a naturally occurring condition in everywoman as that of Jaravastha and Swabhavika Vyadhies. So Rajonivritti also can be divided into two types, Kalaja Rajonivritti and Akalaja Rajonivritti.

1) Kalaja Rajonivritti -
If Rajonivritti occurs at its probable age, it is called as Kalaja Ronivriti. According to Acharya Sushruta (Sushrut Sutrasthana 28/8)\textsuperscript{[1]}, the timely Rajonivritti (Natural diseases like aging) occurs only when the protective measurements of healthcare being practiced. This condition is Yapya by Rasayana.

2) Akalaja Rajonivritti -
If Rajonivritti occurs before or after its probable age, it is termed as Akalaja Rajonivritti. Akalaja Rajonivritti 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. According to Acharya Dalhana, they should be treated on the basis of nature of illness (Roga) surfaced due to pathology of Rajonivritti and on the basis of dosha involved in it. (Dalhana on Sushrut Sutrasthana 24/7)\textsuperscript{[1]} This Akalaja Rajonivritti is more likely treatable than Kalaja Rajonivritti. This magnitude of Kalaja and Akalaja Rajonivritti vary from person to person on the basis of Prakriti as noted by Acharya Charaka himself in Vimana Sthana. Therefore, ultimately the responsibility of deciding Kalaja or Akalaja Rajonivritti should considered upon physician's experience.

Probable Samprapti of Rajonivritti -
As the pathogenesis of rajoiviritti is not elaborately described in as such Ayurvedic text, few points should be taken into consideration, including nidanas which are already described previously in this regard.

First of Ayurvedic classics have quoted the age around 50 years as the probable age for rajoiviritti. This age limit is dominated by "Vata dosha" and obviously it easily is get vitiating during this time. (Bhav Prakash – Purva Khand 2/193)\textsuperscript{[2]} This dominant vata dosha will have effect all over the female body including all anatomical as well as physiological factors by virtue of its characters i.e. "laghuta" and "rukshata". At the age about 50 years, the decline process starts in female body due to jaravastha as a natural process. So, considering these all points, the probable samprapti can be drawn under two main headings, Kalaja samprapti and Akalaja samprapti.

1) Kalaja Samprapti -
Raja is also described as upadhatu of Rasadhatu.
‘Rasat stanya tato raktam’
(Charak Chikitsa 15/17)\textsuperscript{[3]}

Raja being defined as an upadhatu, there is another term Aartavam, which is needed to be properly defined.

Bhavaprakash has equated Aartavam to Shukram dhatu in female.

‘Aartavam api shukravat’
(Bhav Prakash 29/221)\textsuperscript{[2]}
It is responsible for conception strength and complexion of women. Aartavam relates to ovarian function of gamete production & hormone secretion. With aging out of three doshas vayu increase significantly & these occur a considerable decline in pitta & kapha. This also occur in decline in all the seven datus starting from Rasa and also of Oaja. Kalaja samprapti is for naturally occurring rajonivritti like jaravastha and can be constructed on the basis of swabhavika vyadhi. Considering, Kala, Vayu, Swabhava and Jaravastha as Biological Stimulants, which are common for both Jara and Rajonivritti. This factors will generalised dhatukshaya and vasa versa to generalised vatavriddi and kaphakshaya. Both these condition together, will produce particular Rasa-Raktadhatukshaya. The main nourishing Rasadhatu will be decreased both qualitatively and quantitatively and ultimately resulting in its upadhatu Artavakshaya. Due to this factor along with generalized vatavriddi (increased laghu, rksha, khara guna) and kaphakshaya (decreased gura, snigdha, drava guna); ruksaha and shosha of artavavaha srotas take place and all these things will lead to artavanash and manifest as rajonivritti.

2) Akalaja Samprapti -
For Akalaja samprapti, few etiological factors are responsible which can be grouped under two broad headings i.e. Karma or Environment and Abhighatadi. Under this samprapti, etiological factors like karma or environment will lead todhatukshaya awastha and again the same samprapti follows which has already been described in kalaja samprapti and ultimately lead to artavanash and manifest as rajonivritti. Moreover, another etiological factor i.e. Abhighata will directly lead to viddhata of artavavaha srotas resulting into artavanash and ultimately manifests as rajonivritti.

II. Need Of Topic
In modern days one of the most common disorders is the post-menopausal disorders and large section of population which requires medical care for their various symptoms. Large numbers of patient suffering from this disorder are unsatisfied with the existing management of modern drugs. Therefore it is essential to look for alternative medicines. Taking into consideration of high percentage of women affected with post-menopausal disorders therefore this topic was selected for clinical study.

III. Clinical Features
There is no specific description regarding clinical features of Rajonivritti as Ayurveda consider rajonivritti as natural change in body. With aging out of three doshas vayu increase significantly and these occur a considerable decline in pitta and kapha. There also occur in decline in all the seven datus starting from Rasa and also of Ojas. But we can consider symptoms of menopausal syndrome under jaravyadhi. Therefore, lakshan of dhatukshaya and vatpitta dominance are mainly seen along with some manasik lakshana.

Ayurveda Constitution and Dosha in Menopause -
There are many paths in Ayurvedic healing to the relief of menopausal symptoms. Among these, the tridosha system generally serves as a central guiding principle. In the Ayurvedic view of the human body, each of us is born with a fundamental constitution, or prakriti, that remains with us throughout life. Acting upon the constitution are three bioenergetic influences, or doshas; vata, pitta, and kapha. Though one dosha will always preside within the constitution, a state of health is characterized by dynamic balance between all three within the system. These three doshas are sometimes described as the appearances or manifestations of natural forces at work in the body. Each dosha is defined or represented by two of the five natural elements: space, air, fire, water and earth. In contemporary Ayurvedic medicine, a treatment course is always individualized, and will generally be based on individual dosha imbalances (Ayurvedic Vikriti) rather than treatment of specific symptoms. Yet if you have an excess of one dosha during menopause, the resulting imbalance in your body tends to produce a certain “type” of menopausal symptoms characteristic for that dosha’s predominance over the others. Recognizing which dosha dominates your system in menopause will help identify which treatments best match your constitution and are most likely to ease your symptoms.

During a vata-dominated menopause, you will likely be experiencing any of the following symptoms;

- Nervousness
- Insomnia
- Depression
- Constipation

Women whose menopause is dominated by pitta may generally experience any or all of the following symptoms;

- Anxiety
- Mild hot flashes
- Poor skin tone
- Vaginal dryness.

- Angry outbursts
- Short temper
- Urinary tract infections (UTI’s)

- Irritability
- Hot flashes and night sweats
- Skin rashes

- Depress
- Poor skin tone
- Constipation

- Depression
- Insomnia
- Nervousness

Women whose menopause is dominated by kapha may generally experience any or all of the following symptoms;

- Constipation
- Insomnia
- Nervousness

- Depress
- Insomnia
- Nervousness

- Anxious
- Irritability
- Hot flashes and night sweats
Women whose menopause is dominated by kapha, its natural elements, water and earth, can manifest as a “heavy menopause,” where you’re feeling tired a lot, have difficulty concentrating or just can’t seem to shake that “heavy feeling.” Other symptoms may include:

- Weight gain
- Sluggishness
- Slow digestion
- Sleepiness
- Fungal infections
- Fluid retention

**Manasika Lakshana’s** -
After considering the clinically observed features of rajonivritti through Ayurvedic point of view, psychological symptoms also commonly observed due to vitiation of Manovaha srotas. So these symptoms can be grouped under the heading of manasika lakshanas as follows-

- Krodha
- Shoka
- Bhaya
- Dwesha
- Smriti Hras
- Utsaha Hani
- Dairya Hani
- Shirah Shula
- Vishada
- Chinta
- Medhahras
- Alpa Harsha and Priti

**IV. Modern View**

Menopause is defined as permanent cessation of ovarian function resulting in permanent amenorrhea. It takes 12 months of amenorrhea to confirm that menopause is not set in. Menopause is generally occurring between age of 40 - 45 years of average is 47 years. Climacteric is phase of weaning ovarian activity and may begin 2 – 3 years of menopause and continue for 2 – 5 years of after it. During the phase there occurs decline in ovarian activity. In starting ovulation fails, therefore no corpus luteum and hence no progesterone is secreted by the ovary. Therefore, menopause is often preceded by anovulatary and irregular menstrual cycle. After some time graffian follicle formation also stops, estrogen activity and finally atrophy of endometrium leads to amenorrhea. As the result of fall in estrogen level, there is rebound increase of FSH and LH by ant pituitary gland.

**Menopausal Symptoms** -

1. Immediate -
   These symptoms relate to vasomotor, psychological, sexual and urogenital symptoms.
   - Vasomotor symptoms –
     Hot flushes, night sweats palpitations and headache is the most distressing symptoms of menopause. These are more severe after surgical menopause. These are attributed to pitta and vata doshas.
   - Psychological symptoms –
     Many females are affected with anxiety, depression, decrease in libido and dementia. Ayurveda hypothesis them occur to the imbalance of vata.
   - Urogenital symptoms –
     Urinary incontinence (stress and urge) vaginal dryness and prolapsed of uterus are very important. Ayurveda described shushka yoni (dry vagina with atrophy of urogenital tract) and Maha yoni (uterovaginal prolapse).

2. Long Term –
   Skeletal system and cardiovascular system are adversely affected.
   - Skeletal system –
     Osteoporosis occur rapidly after menopause in women. It is responsible for the greater incidence of fracture of spine, proximal femur, distal radius. Bone forming units are responsible for skeletal growth, repair, &replacement. They are under the influence of variety of regulatory factor i.e. parathormone, calcitonin, vitamin D, growth factor, gonoidal steroids calcium and phosphate etc. ERT (Estrogen replacement therapy) therefore only partially helps the re-mineralization of bones and prevention of fractures. According to Ayurveda osteoporosis can be explained on the basis of excess vata formation in pakvashaya and asthi dhatu. Therefore, we give agnivardhan, deepen and pachan drugs.
   - Cardiovascular disease –
     The decline of ojas (ashta bindu- para ojas) and avalambak kapha due to excess of vata is the cause of cardiovascular disease.

**Management of Menopausal Syndrome** -

1) Counselling -
   It is very important to maintain her physical and mental status. She should be educated about proper diet. Diet should include at least 1.2 gms of Ca, vitamin A, C, E, D (400 mg) + weight bearing exercises are also
necessary.
2) HRT (Hormone Replacement Therapy) –
Only oestrogen replacement therapy is not sufficient to overcome this problem. Because many other hormones eg. DHEA, melatonin and various systems are affected in menopause. Moreover, menopause is the natural process of transition to a new phase of life for a woman.
Therapy needed in woman who are - Symptomatic for 3-6 months. High risk for CVD (Cardiovascular Disease), osteoporosis,Alzheimer’s disease. After surgical oopherectomy, premature menopause. Who demand prophylactic HRT Oestrogens should be given in smallest effective dose for a short possible period of 3-6 months.
Short term oestrogen therapy is beneficial in delaying osteoporosis & reducing the risk of cardiovascular diseases in post-menopausal woman.

Risks of HRT-
Adverse cardiovascular status. Malignancy and thromboembolic disease.Endometrial cancer if E2 is taken alone. Breast cancer is due to progestogens if HRT is taken over 5 years. A study published in Lancet by Tungstal et al in 1998 clearly published that these are no beneficial effects occurred by HRT on cardiovascular disease. Moreover, these are reports suggesting the increased incidence of malignancy and thromboembolic disease. HRT can be at best be used for a short term to overcome some of the troublesome symptoms like hot flushes. Again not all the patients are benefited with ERT because of genetic characterization of E2 receptor. This finding supports the concept of individualization of therapy in Ayurveda based on individual constitution; Prakriti.

V. Ayurveda View

Basic of Ayurvedic Therapy in Menopause-
Sushruta contributed ageing and diseases as the cause for the menopause. According to jara rog chikitsasutra rasayana is the only way to combat symptoms associated with jara. By definition Rasayana, ‘Labhopayo hi shastanam Rasadinam Rasayanam’
(Charak Sanhita Siddhisthana 1/1/7-8)

Rasayana Therapy -
Literally the term Rasayana refers to the means of obtaining the optimum nourishment to the Rasadi Dhatus. Thus, the Rasayana is a specialized type of treatment influencing the Dhatus, Agnis and Strotas of the body leading to an overall improvement in the formation and maintenance of the living tissues and helps in the prevention of ageing, improving of resistance against diseases, bodily strength and process of improving mental faculties.
Daily consumption of ghee, milk, which increase kapha can delay the onset of menopause.
‘Ghritaksheeradi nityasu muditasu kaphatmasu|
Aartavam tishthati chiram viparitasvato anyath[5]||’
(Ashtang Samgraha, Sharir 1/69)
Rasayanas are of three types-
1) Aachar Rasayana -
It is basically related to lifestyle management. According to Ayurved Sadvritta and Swasthavritta, by following Dinacharya, Ratricharya and Ritucharya along with taking measures to relieve stress- strain aging process can be delayed & symptoms associated with menopause can be minimized. Muscular exercise is most important to maintain the strength & mineralization of the bones. Strength of the bone depends essentially on the integrity of collagen matrix. In terms of reduction of kapha this is decline in collagen matrix resulting in osteoporosis. Sedentary lifestyle enhances the osteoporosis. Surya-namaskara, exercise, yoga pranayama can be proved very beneficial effect by relieving stress. They also improve muscle tone & hence improves urinary troubles.
2) Aahara Rasayans (food as drug) –
In Menopause related to dhatukshaya that means ojas-kshaya.Dietary articles consisting of black grams, milk, ghee & meat soups. Ghee has a special role in improving sukradhatu. Ghee is now considered to be a good source of omega-3 fatty acids.Til (sesame) & its oils are very good in promotion of raja. For rajapravartan use Gud (jaggery) + black til. Black til are good source of zinc and contains antioxidant property.
Vegetarian diet helps mineralization of bone. A balanced vegetarian diet is the most important aspect of the preventive management of menopause. Chickpeas, Bengal grams & black grams are good source of phytoestrogens. Phytoestrogens plays vital role in oestrogenic therapy. If oestrogen levels are high as in fibroadenosis, then phytoestrogens compete with oestrogen receptors as they have weak oestrogenic activity, thus producing beneficial antiestrogenic effect on body. They also increase level of sex hormone binding globin
(SHBG) which gives protection against breast cancer & coronary heart diseases.

3) Dravya rasayana (Drug therapy) –
   Actions of Rasayana Drug
   • Prevents senile degeneration
   • Promote body resistance and immunity
   • Increase vitality
   • Restore health and increase long life
   • Stimulate metabolism
   • Improves memory and intelligence
   • Freedom from disease

IV. Material (Rasayana)

In Ayurveda for menopausal syndrome we used drugs which are vatapitashamak, rasayana, hrudya, ojovardhaka, vatanulomak, deepaniya, balya and brimhana are the drug of choice.

Many of the rasayana herbs are capable of strengthening the immune system; below are the herbs we have listed for this study.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Dravya</th>
<th>Rasa</th>
<th>Guna</th>
<th>Vriya</th>
<th>Vipaka</th>
<th>Doshaghnta</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shatavari (Asparagus Racemosus)</td>
<td>Madhur</td>
<td>Tikta</td>
<td>Snigdh</td>
<td>Shit</td>
<td>Madhur</td>
<td>Pittaghna Vataghna Rasayan Medhya</td>
</tr>
<tr>
<td>2</td>
<td>Shatpushpa (Anethum Sowa)</td>
<td>Katu</td>
<td>Ushna</td>
<td>Lagha</td>
<td>Ushna</td>
<td>Katu</td>
<td>Vataphalghna Dhatwagnidpan</td>
</tr>
<tr>
<td>3</td>
<td>Chandrashur (Lepidium Sativum)</td>
<td>Katu</td>
<td>Tikta</td>
<td>Laghu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphavataghna Balavardhana Pushikar</td>
</tr>
<tr>
<td>4</td>
<td>Bala (Sida Cordifolia)</td>
<td>Madhur</td>
<td>Snigdh</td>
<td>Gur</td>
<td>Shit</td>
<td>Madhur</td>
<td>Vatapittaghna Rasayan Balya Bruneiya</td>
</tr>
<tr>
<td>5</td>
<td>Shankhapushpi (Convulvulus Pluricaulis)</td>
<td>Kashay</td>
<td>Snigdh</td>
<td>Picchil</td>
<td>Ushna</td>
<td>Madhur</td>
<td>Tridoshaghna Medhya Rasayan Vrushya Smrutikantibalprada</td>
</tr>
</tbody>
</table>

• ‘Shatavari’ –
   Shatavari effect proves to be beneficial to women in all stages of life. Charaka has categorized it as Balya, Vayasthapana and Shukravanana. Also, he has cited it as a rejuvenative to Rasa and Mamsa dhatus and Mamsavaha srotasa. Shatavari contains natural phytosterogens and so can be used as an alternative to synthetic HRT, gently and naturally rebalancing estrogen levels.

• ‘Shatpushpa’ –
   ‘Shatpushpa’ is extremely helpful in the regulation of menstrual flow in young women especially. It is effective for people who complain of spasmodic pain. This is a remedy recommended to people who face issues in menstruation due to anemia.

• ‘Chandrashur’ –
   ‘Chandrashur’ is one of the herb mentioned in all ancient scriptures of Ayurveda. It is the most commonly used herb for household remedies. It is traditionally used in the postpartum period, to promote the lactation vata related issues. Its seeds are useful in are used in bloating, irregular periods, estrogen deficiency. Chandrashur alleviates vata and kapha dosha’s. Ayurveda Acharyas have grouped ‘Bala’ under Balya (body strengthening herbs), Brimhaniya (body bulk increasing herbs), Prajashthapana (herbs used to cure infertility), Madhura skanda (herbs with sweet taste) and Vataksamhamana (herbs which normalize vata dosha). Bala normalizes vata and pitta. Hence it is used in diseases which are caused due to vitiation of vata and pitta.

• ‘Shankhapushpi’ –
   ‘Shankhapushpi’ that has traditionally been used as a cognitive enhancing herb. It has a great remedy when Pitta dosha is involved in excess. Although, it is effective in aggravation of all three doshas, effectively manages pitta aggravation.

VII. Conclusion

Only few scattered references are available in ancient literature on Rajonivritti. All the Acharyas have mentioned fifty years as the age of Rajonivritti. The logic behind the age of Rajodarshana and Rajonivritti is that Raja is byproduct of Rasadhatu which function better in Tarunavastha and its function reduces in Paudhavastha. Rajonivritti is a physiological process but when it causes discomfort either to mind or body it attains Vyadhisvarupa and becomes a disease status which requires medical interference. Both the term Rajonivritti and Menopause literally convey same meaning.
Menopause is a significant landmark in female. It marks the closure of menstrual life. Climacteric syndrome is the result of the gradual failure of the ovaries to produce oestrogen and progesterone as a consequence of which the pituitary gland becomes more active (positive feedback) and produces FSH and LH in greater quantity resulting into different vasomotor and psychological symptoms. As it is known that Rajonivritti occurs due to aging process suggesting aggravation of Vatadosha and diminution of Kaphadosha and vitiated Vata also expel out the Pitta from its origin called Ashyapakarsha.

The symptoms occurring in menopausal syndrome like; sleep disturbance, irritability, hot flushes, etc. can be co-relate with Vata Pittaja Lakshana. As Rajonivritti deals with Jaravastha, Rasayana therapy is the line of treatment and for prevention of longer term effects of depletion of Dhatus. Hormone Replacement Therapy (HRT) is one and only alternative for this health hazard by which one can get spectacular achievement in combating the disease, but it has a wider range of secondary health complications like vaginal bleeding, breast cancer, endometrial cancer, gallbladder diseases etc. On the other hand, this therapy is not much effective in the psychological manifestations of this stage. Concluded that Ayurvedic treatment like Rasayana is potent, cost effective and increase the longevity.

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