



**CRITICAL ANALYSIS ON THE ROLE OF PANCHAKARMA IN THE
MANAGEMENT OF PSYCHOLOGICAL MANIFESTATIONS DURING
MENOPAUSE**

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ABSTRACT

Menopause/ *Rajonivritti* is a normal physiological phenomenon in women's life due to the aging process. During this period, they are often affected with various *Manasa Bhavas* which ultimately leads to somatic and psychological disturbances. Being a common and distressing problem, it needs effective and safe treatment. *Ayurveda* recommends various solutions for a safe and happy transition into menopause. Timely intervention with appropriate *Panchakarma* therapies can pave an effective way to tackle the symptoms associated with menopause. The management mainly focuses on strengthening and rejuvenating the reproductive system and whole body. After analysing the *samprapti* and the *lakshanas* manifested, *vata pitha hara chikitsa* is to be adopted here along with *Srotosodhana* and *Rasayana chikitsa*. *Panchakarma* therapies in form of *Antahparimarjana* and *Bahiparimarjana chikitsa* can be employed for controlling the psychological manifestations of *Rajonivritti*. The *Antahparimarjana chikitsa* includes *Snehapana*, *Virechana*, *Nasya*, *Niruha basti* and *Matra basti*. *Bahiparimarjana chikitsa* includes *Abhyanga*, *Pada abhyanga* and *Murdhni thailas*.

KEYWORDS

Rajonivritti, Menopause, Peri menopause, Panchakarma, Shodhana, Parimarjana chikitsa

INTRODUCTION

Menopause is one of the most significant events in a woman's life. It is a natural phenomenon of ageing occurring at the age of 45-55 years. Every woman experiences a lot of negative changes during this phase of life as a part of hormonal derangement. These changes may cause loss of equilibrium and discipline in their day-to-day life. Various psychological conditions like greed, grief, envy, fear, anger, excessive attachment, etc., have been considered to play a major role in the precipitation of diseases. It is advised that one must control these emotions (*Manasa Bhavas*) or else it may lead to various *Manasika Rogas*. Even though menopause is a natural process, it is a difficult period to most of the women. During this period, they are often affected with various *Manasa Bhavas* which ultimately leads to somatic and psychological disturbances. Being a common and distressing problem, it needs effective and safe treatment. Usually in its management, physical problems are concentrated more and psychological aspects are often neglected. So, it is very necessary to treat these psychological symptoms with utmost care along with counselling. *Ayurveda* recommends various solutions for a safe and happy transition into menopause. Timely intervention with appropriate *Panchakarma* therapies can pave an effective way to tackle these symptoms. This paper deals with the role of *Panchakarma* therapies in managing the psychological manifestations in menopause.

MATERIALS AND METHODS

Literary search was done in classical *Ayurveda* literature and using data bases like PubMed, Scopus, AYUSH Research Portal, DHARA and Google scholar. The search was done using keywords *Rajonivritti*, *Manasa bhavas*, *Panchakarma*, Menopause, etc. Total of 20 articles comprising of 14 review articles on *Rajonivritti*, 4 RCT on interventions in menopausal symptoms and 2 case reports on premature menopause and *manasa vikaras* were reviewed. Studies related to the physical symptoms of menopause were excluded.

RESULT

Out of 20 articles, 3 studies pertaining to the psychological manifestations in menopause were selected. The data from the literary search is presented in an organised manner.

***Rajonivritti* (Menopause)**

It is a normal physiological phenomenon in women's life due to the aging process¹. Also, it is characterized under *Swabhavika vyadhi*.² The term '*Rajonivritti*' is made up of two words

Raja means *Artava* (menstruation), and *Nivritti* means ending. Hence, the end of *Artava pravritti* is called *Rajonivritti*. The word ‘Menopause’ comes from the Greek word ‘Menos’(month) & ‘Pauses’ (cessation)³. Menopause is the permanent cessation of menstruation at the end of reproductive life due to loss of ovarian follicular activity⁴. It is confirmed by amenorrhea of consecutive 12 months. Due to the effect of aging, menopause occur at the of 50 years⁵. This is the period of transition from *Pitta* predominant middle age to *Vata* predominant old age. There might be variation in the age of onset and cessation of *Artava*.

Nidana of Rajonivritti

Some of the factors which are mentioned by the *Acharyas* in the context of “*Rajah utpathi*” *hetus* like *Rasa dhatu*, *Rakta dhatu* and *Ahararasa* can be considered as reasons for *Rajah nivritti* also. When there is depletion in these factors, it can lead to *Rajonivritti*. Besides these, some very specific factors for *Rajonivritti* are *Kala*, *Swabhava*, *Vayu*, *Karma*, *Dhatu kshaya* and *Abhighata*⁶. Numerous studies have showed the relationship between social factors and mental health during menopause, such as age, marital status, low socio-economic or financial status, stressful life events and lack of family or social support⁷.

Probable Samprapti of Rajonivritti

Rajonivritti is influenced by *shareera shithilta* and *vrudha avastha* (old age). It can be considered under *swabhava bala pravritta vyadhi* which occurs at *sandhi kala* of *Praudhavastha* and *Jaravastha*, where *dhatu kshaya* occurs and *Vata dosha* starts overpowering *Pitta dosha*. Gradual decline of all *dhatu*s occurring in *Jaravastha* is a natural process. The *Vata dosha* which is dominant during this period specially with *Laghu* and *Ruksha guna* results in reduction in *dravata* of *Rasa dhatu*. This further leads to the *kshaya* of all the remaining *dhatu*s and their respective *Updhatu*s (sub tissues). *Raja* is a *updhatu* of *Rasadhatu*, hence the *kshaya* of *raja* (*Artava*) also takes place during this degenerative period. During *Praudhavastha*, *Pitta Dosha* is also provoked along with *Vata*, hence symptoms of *Pitta Vriddhi* are also present along with *Vata dosha*.⁸ Along with *sharira doshas*, *manasika doshas* like *rajas* and *tamas* are also vitiated by the *Vatadi doshas*, leading to various psychological disturbances. *Manasika Bhavas* like *Chinta* and *Soka* may vitiate *Vata dosha* which further leads to *Kapha kshaya*⁹. Psychological symptoms of perimenopause may also be attributed to decrease in *Kapha dosha* and *Rasa dhatu*.

Status of Hormones at Menopause

During climacteric period, ovarian activity declines, initially ovulation fails, no corpus luteum forms, and no progesterone is secreted by the ovary. Therefore, the pre- menopausal menstrual cycles are often anovulatory and irregular. At menopause, there is 50% reduction in androgen production and 66% reduction in oestrogen¹⁰. The ovary secretes a small amount of testosterone which causes mild hirsutism and also there is fall in the prolactin level during this period. Ultimately due to physiological aging GnRH and both FSH, LH decline along with decline of oestrogens.¹¹ Later, Graafian follicles also fail to develop. Cessation of ovarian activity and a fall in the oestrogen level as well as inhibin level cause a rebound increase in the secretion of FSH and LH by the anterior pituitary gland. The FSH level may rise as much as 50-fold and LH 3-4fold. With further advancing years, gonadotrophin activity of the pituitary gland also ceases, and fall in FSH level eventually occurs leading to menopause. Oestrogenic activity is also reduced, and endometrial atrophy occurs which primarily leads to amenorrhea.

Types of *Rajonivritti*

Rajonivritti is of two types: *Kalaja Rajonivritti* and *Akalaja Rajonivritti*. *Kalaja Rajonivritti* occurs at its probable age (i.e., around 50years of age)¹² while *Akalaja Rajonivritti* occurs before or after its probable age (i.e., early menopause which occurs at or before the age of 40 years¹³ and delayed menopause which does not occur even after 55 years).

Signs And Symptoms

The signs and symptoms which may appear during premenopausal period are *Yatochita kala adarsana* (Delayed or Irregular menstruation), *Alpata* (Oligo menorrhoea) and *Yoni vedana* (Pain in genital organs)¹⁴. Further it gradually diminishes the size (Atrophies) of *stana* (Breast atrophy), *Garbhashaya* (Uterus), and *Yoni* (All genital organs), *Artava* and pubic and axillary hairs and their functions.¹⁵ The symptoms and the health concerns of menopause include vasomotor symptoms, osteoporosis and fracture, urogenital atrophy, cerebrovascular diseases, cardiovascular diseases, psychological changes, dementia, skin and hair, cognitive decline and sexual dysfunction. Hence, the clinical symptoms manifested in *Rajonivritti* can be categorised under *Doshaja lakshanas*, *Dhatukshayaja lakshanas* and *Manasika lakshanas*.

Analysis of Manasika lakshanas

Psychological symptoms are manifested due to the vitiation of *Manovaha srotas*. After considering the clinically observed features of *Rajonivritti*, symptoms like *Krodha* (anger), *Shoka* (grief), *Bhaya* (fear), *Dvesha* (aversion), *Smritihrasa* (memory loss), *Utsaha hani* (decreased enthusiasm), *Dairy Hani* (impatience), *Shira Shula* (headache), *Vishada* (depression), *Chinta* (over thinking), *Medhahrasa* (loss of intellect) can be included under *Manasika lakshanas*.

During perimenopause, up to 10% of women experience depression that may be caused by unstable Oestrogen levels. At menopause, Oestrogen levels fall to very low levels. Oestrogen acts everywhere in the body, including the parts of the brain that control emotions. Some of Oestrogen's effects includes increasing serotonin and the number of serotonin receptors in the brain, modifying the production and the effects of endorphins, the "feel-good" chemicals in the brain, possibly stimulating nerve growth by protecting nerves from damage.¹⁶ Fluctuating or low oestrogen may decrease Serotonin secretions. Decreased Serotonin levels may lead to depression and stress.

Prakruti and Artava virama

Prakruti of the women has a significant role in *Artava virama* and its management. Women with *kapha* predominance *prakruti* have a tendency to delayed manifestations of ageing and may show delayed menopause. In a *kapha prakruti* person, weight gain, excess sleep, slow digestion, symptoms related to fluid retention will be more. *Pithaja Prakruti* women are susceptible to untimely or premature manifestations of ageing and hence may have early menopause. In a *pithaja prakruti* individual severe hot flashes, anger, short temper, excessive perspiration & thirst, will be more common and frequent. In *Vata prakruti* individuals, symptoms like sensory motor problems, arthropathies and psychological disturbances like depression, anxiety, irritability and mood swings will be more.¹⁷

Management

After analysing the *samprapti* and the *lakshanas* manifested, *vata pitha hara chikitsa* should be adopted in the management of menopausal symptoms along with *Srotosodhana* and *Rasayana chikitsa*. Menopausal management mainly focuses on strengthening and rejuvenating the reproductive system and whole body. *Rasayana chikitsa* provides a comprehensive physiological and metabolic restoration for aging. It also helps in the regeneration, revival and revitalization of *Dhatu*¹⁸. Considering the psychological symptoms, the *Vibhrama* of *Manas and Buddhi* gives impression of an evident *Srotorodha*

which needs to be considered while formulating the treatment protocol.¹⁹ Hence, a comprehensive *Ayurveda* protocol after assessing the *doshas* and *lakshanas* employing appropriate *Panchakarma* therapies in the form of *Antahparimarjana* and *Bahiparimarjana chikitsa* can play a significant role in controlling the psychological manifestations of *Rajonivritti*.

Discussion on Management

The treatments employed can be considered under two headings namely *Antahparimarjana* and *Bahiparimarjana chikitsa*. The *Antahparimarjana chikitsa* includes *Snehapana*, *Virechana*, *Nasya*, *Niruha basti* and *Matra basti*. *Bahiparimarjana chikitsa* includes *Abhyanga*, *Pada abhyanga* and *Murdhni thailas*.

Role of *Antahparimarjana chikitsa*

Snehapana is the internal administration of medicated lipids for a specific period of time. It helps in pacifying the vitiated *doshas* as well as can be given prior to *shodhana* procedures. Intake of *Ghrita* (ghee) is ideal for improving *dhi*, *smruti*, *medha*, *agni* and is *vatapithahara* in nature. Daily intake of *ghrita* prevents early menopause²⁰. Further *Brimhana Sneha* is best for *Vruddhavastha* and *Mandagni*²¹. *Purana ghrita* is especially mentioned for psychiatric conditions. *Tila Taila* (sesame oil) which is considered best for Vata vitiation, also has the property of *yonivisodhana*.²² *Tila taila* contains an amino acid known as tyrosine, which is directly connected to serotonin activity.

Blood brain barrier (BBB) which is a lipophilic molecular structure, allows lipids and lipid soluble drugs pass through it easily. Hence, the drugs which are given in the form lipids absorbs rapidly in the target areas of central nervous system. Traditionally prepared ghee contains DHA, an omega 3 long chain poly unsaturated fatty acid which is seen in high concentration in brain cells also. A number of studies have shown that DHA have a positive outcome in cognitive decline. Ghee is known to have antioxidant property which acts upon the degenerative brain cells and repair them. It also acts in normalizing the chemical changes in brain by balancing the neurotransmitters²³.

For the management of psychological symptoms like anxiety, anger, etc associated with pitha dosha, drugs which are *Medhya* and *sitaveerya* like *Brahmi*, *Mandukaparni*, *Shankupushpi*, *Yastimadhu*, *Kushmanda*, etc can be preferred. In case of sadness/depression imbalance of *kapha dosha* is predominant and hence *Medhya* and *ushna virya* drugs like *Vacha*, *Guduchi*,

Hareethaki, etc can be adopted. Medicated *snehas* like *Brahmi ghrita*, *Phalasarpi*, *Sukumara ghrita*, *Tila taila*, etc can be taken for internal administration or *snehapana*.

Virechana karma (Purgation) is the expulsion of *doshas* through *adhomarga*. It is very effective in calming down the aggravated *pitha dosha* & *raktha dhatu*. *Virechana Karma* improves the *Agni*, eliminates the vitiated *pitta* and pacifies *vata dosha* as well. Also, *Virechana* bestows *Indriya prasada* (clarity of sense organs) and strengthens the whole body and improves *bala*. Psychological symptoms like anger, agitation, impairment in sleep, mood swings, etc which are very common during menopause can be well managed with *Virechana karma*. In menopause, it can be administered with *Trivrit lehya*, *Eranda taila*, *Gandarvahastadi taila*, *Mishraka Sneha*, etc.

Vasti karma is the administration of medicated *kashayas* /*snehas* through anal route. *Vasti* is one of the best treatment modalities for maintenance of *Vata dosha* and is considered as *Ardhachikitsa*. Medicated enemas of *kashaya* or *snehas* are administered for calming down the aggravated *Vata dosha* which tends to be vitiated during menopause. *Madhutailika Vasti* is one of the best *Vata Shamaka Vastis*, which can be particularly used in delicate woman during *Jaravastha*. It is having both *Rasayana* and *Vata hara* properties. *Madhutailika Vasti* has the properties of both *Sneha Vasti* as well as *Niruha Vasti*.²⁴ *Vayasthapana gana*²⁵ *siddha ksheerapaka basti* has action like *jeevaniya*, *medhya*, *brumhaniya* and *Rasayana*. It is *vata pitha samana* & in the form of *vasti* maximum absorption can be ensured. Drugs like *Guduchi*, *Aparajita*, *Haritaki*, *Mandookaparni* and *Satavari* have *Medhya* property which may help to relieve psychological symptoms like depression, difficulty in concentrating, irritability, etc. Some of drugs mentioned in *Vayasthapana gana* have anti-stress, sedative, hypnotic and anxiolytic property which may help to reduce symptoms of perimenopause. Anti-depressant property of *Satavari* and *Guduchi* may help to overcome depression. Drugs like *Satavari*, *Haritaki* and *Mandookaparni* are *Hridya* in nature and helps to keep the mind calm²⁶.

Matra basti is also a good choice in management of symptoms in menopause as it can be given at all time without much complications.²⁷ It also helps in controlling the vitiated *vata dosha* which is predominant during menopause. It can be administered with *Sukumara ghrita*, *Dhanwantara taila*, etc.

Nasya karma is the procedure of administration of medicines through the nasal route. Nose is considered as gateway of *shira*. So, through the *Sukshma strotas* in nasal route, *Sneha* reaches to *shirogata marma* and spread to whole *mastishka* (brain) and helps to remove vitiated *doshas*. As *shira* is considered as seat of *manas*, it will act on *manovaha strotas* and help in

mitigating *manasika lakshanas*²⁸. Stress and brain have a strong relation with each other. By providing nourishment to brain, stress can be reduced and hence may help in preventing psychosomatic disorders²⁹. The olfactory nerve have direct connection with limbic system and also have an impact on the higher mental functions. *Nasya karma* may thus be employed for controlling the emotional and psychological manifestations associated with menopause. *Brimhana nasya* alleviates vitiated *vata* and *pitha doshas*. Medicines like *Brahmi ghrita*, *Ksheerabala taila*, *Varunadi ksheera gritha*, *Madhukadi taila*, etc can be used for administering *Nasya Karma*.

Role of Bahiparimarjana chikitsa

Abhyanga is the application of medicated *sneha* over the whole body. It is one among the *bahya snehana* procedures. It helps in pacifying *vata dosha* and maintains health of skin,³⁰ which is again the seat of mind. Also, massage is proven to reduce subjective stress symptoms in the body.³¹ *Abhyanga* reduces stress, mood swings, anxiety, fatigue and induces sound sleep during night. Massage lowers levels of cortisol - the “stress” hormone that raises alertness. It also increases levels of the neurotransmitter’s serotonin and dopamine, which further helps in calming the mind.

Padabhyanga is the application of medicated *sneha* to the foot, followed by massage. It puts pressures on vital points on the foot to boost physical and mental health. It promotes sound sleep, reduces mental stress and anxiety, relieves nervous tension, which ultimately improves one’s overall health. Many studies have revealed that foot reflexology technique could reduce the psychological distress like depression and anxiety during menopause.³²

Murdhni Taila is a type of *Bahya Snehana* (external oleation) procedure on the *shiras* in which medicines remains in contact with the scalp for a fixed duration of time³³. It controls the vitiation of *vata* and does not increase *Kapha* in the *Moordha*.³⁴ Thus, it plays a vital role in the treatment of psychological disorders. *Tarpana* or *snehana* type of treatment is ideal in the management of psychological problems such as dementia, depression, insomnia, anxiety, mood swings, anxiety etc which are more common in post-menopausal women.

The four types of *Murdhni thaila* includes :- **Shiroabhyanga** (Application of oil on the head), **Shiro seka** (continuous pouring of medicated oil in a particular manner on the forehead), **Shiropichu** (placing layers of cotton dipped in oil on scalp) and **Sirobasti** (The retention of medicated oil on the head for a prescribed period). These procedures soothe the stressed and agitated mind and helps to keep mind calm and reduce mood swings associated with menopause. It also helps in improving the impulse transmission in the nerve and synapses by

influencing the activity of neuro transmitters³⁵.The dripping of medicated oil over the forehead in an oscillatory movement produces vibrations developing a relaxing effect on the brain. *Sirodhara* with warm oil may activate the functions of thalamus which leads to improved secretion of serotonin which is usually found low in cases of depression. Also, *dhara* may probably decrease the brain cortisone and adrenaline level which leads to reduction of stress level.

CONCLUSION

Even though menopause is a normal physiological phenomenon, women are often affected with various *Manasa Bhavas* which ultimately leads to somatic and psychological disturbances. *Ayurveda* recommends various solutions for a safe and happy transition into menopause. Timely intervention with appropriate *Panchakarma* therapies can pave an effective way to tackle the symptoms associated with menopause. The management mainly focuses on strengthening and rejuvenating the reproductive system and whole body. After analysing the *samprapti* and the *lakshanas* manifested, *vata pitha hara chikitsa* has to be adopted here along with *Srotosodhana* and *Rasayana chikitsa*. A comprehensive *Ayurveda* protocol along with appropriate *Panchakarma* therapies in form of *Antahparimarjana* and *Bahiparimarjana chikitsa* can play a significant role in controlling the psychological manifestations of *Rajonivritti*.

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