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UNDERSTANDING *SAPTA DHATU* DYNAMICS: OBSERVATIONAL INSIGHTS INTO *DHATU SARTA LAKSHANA* IN MENOPAUSAL WOMEN

*Dr. Nisha Mor¹, Dr. Darshana²

¹Ph.D. Scholar (Ayurved), Department of Kriya Sharir, Desh Bhagat University, Mandi Gobindgarh Punjab.

²Guide & Associate Professor, Department of Kayachikitsa, Desh Bhagat University, Mandi Gobindgarh Punjab **Email id - Dahiya.darshana222@yahoo.com**

***Corresponding Author-** Dr. Nisha Mor, Ph.D. Scholar (Ayurved), Department of Kriya Sharir, Desh Bhagat University, Mandi Gobindgarh Punjab

Email id - nishamor27@gmail.com

Abstract

The concept of *Sapta Dhatu* (seven bodily tissues) is fundamental in Ayurveda, encompassing the progressive nourishment and maintenance of the body through *Rasa, Rakta, Mamsa, Meda, Asthi, Majja*, and *Shukra/Artava*. The physiological and pathological states of these *Dhatu*s play a crucial role in determining health and disease. During *Rajonivritti Awastha* (menopause), the dynamic hormonal and metabolic shifts significantly impact *Dhatu Sarta Lakshana* (characteristics of tissue excellence), manifesting as physical and psychological changes. This study explores the interplay of *Sapta Dhatu*s in menopausal women, highlighting their role in maintaining health and addressing tissue degeneration. The classical Ayurvedic descriptions of *Dhatu Sarta* are analyzed in the context of menopause, focusing on changes in *Ojas, Bala*, and tissue integrity. Furthermore, the correlation between *Dhatu Sarta Lakshana* and modern physiological understanding of menopause provides a comprehensive approach to holistic management through Ayurvedic interventions like *Rasayana, Pathya-Apathya*, and *Satvavajaya Chikitsa*. This paper underscores the importance of individualized Ayurvedic strategies to enhance *Dhatu Sarta* and promote health in *Rajonivritti Awastha*.

Keywords:

Sapta Dhatu, Dhatu Sarta Lakshana, Rajonivritti Awastha, menopause, Ayurvedic management

Introduction

The concept of *Sapta Dhātu*, or seven bodily tissues, forms the foundation of Ayurvedic physiology and pathology. These tissues—*Rasa* (plasma), *Rakta* (blood), *Mamsa* (muscle), *Meda* (fat), *Asthi* (bone), *Majja* (bone marrow), and *Shukra/Artava* (reproductive tissue)—are sequentially nourished through the process of *Ahara Paka* (digestion and metabolism).¹ The harmonious functioning and integrity of these *Dhatus* ensure the body's vitality, immunity, and overall health. In Ayurveda, *Dhatu Sarta* (tissue excellence) is an indicator of optimal health and is associated with physical strength, mental stability, and resilience.²

Rajonivritti Awastha, commonly referred to as menopause, marks a significant transitional phase in a woman's life. It is characterized by the cessation of menstruation, which corresponds to a decline in the function of *Artava Dhātu* and hormonal changes that affect all seven *Dhatus*.³ This phase is often accompanied by a range of symptoms, including hot flashes, mood swings, fatigue, and bone density loss, reflecting the deterioration of *Dhatu Sarta*. The Ayurvedic perspective provides a unique understanding of these changes by linking them to imbalances in *Doshas* and the depletion of *Ojas*.⁴

The decline in *Dhatu Sarta* during menopause is a natural process, but its intensity and effects can vary based on individual constitution (*Prakriti*), lifestyle, and dietary habits. For instance, *Asthi Dhātu* (bone tissue) and *Meda Dhātu* (fat tissue) are particularly affected, leading to conditions like osteoporosis and changes in body composition.⁵ Understanding these changes from an Ayurvedic lens allows for a more holistic approach to managing menopause, emphasizing prevention and rejuvenation.⁶

Ayurveda offers several strategies to mitigate the effects of menopause and maintain *Dhatu Sarta*. Interventions such as *Rasayana Chikitsa* (rejuvenation therapy), appropriate dietary regimens (*Pathya-Apathya*), and mental health practices (*Satvavajaya Chikitsa*) aim to restore balance and promote overall well-being.⁷ By integrating classical Ayurvedic principles with modern scientific insights, a comprehensive framework for managing *Rajonivritti Awastha* can be established, ensuring a smoother transition and enhanced quality of life for menopausal women.⁸

Globally, menopause affects a significant proportion of the female population, with the average age of onset ranging from 45 to 55 years. According to WHO estimates,

approximately 1.2 billion women will be postmenopausal by 2030, reflecting the increasing global life expectancy.⁹ Menopausal symptoms, such as hot flashes, insomnia, mood swings, and osteoporosis, vary widely across cultures and regions, influenced by genetic, environmental, and lifestyle factors.¹⁰

In India, the average age of menopause is slightly lower, typically occurring between 46 and 48 years. The rapid urbanization, changing dietary patterns, and increased stress levels have contributed to a rising prevalence of menopausal symptoms among Indian women.¹¹ Studies indicate that nearly 70-80% of Indian women experience moderate to severe menopausal symptoms, yet awareness and access to healthcare for menopause management remain limited. Addressing these challenges requires a combined effort of public health initiatives, education, and the integration of traditional and modern healthcare approaches.¹²

Menopause is defined as the permanent cessation of ovarian function, marked by a decline in estrogen and progesterone levels. This hormonal transition impacts various physiological systems, including the skeletal, cardiovascular, and neuroendocrine systems. Symptoms such as osteoporosis, cardiovascular risks, mood disorders, and cognitive changes are explained by the reduced hormonal influence on cellular and tissue function.¹³ Contemporary management focuses on hormone replacement therapy (HRT), lifestyle modifications, dietary adjustments, and psychological support to alleviate symptoms and improve the quality of life during this transitional phase. Integrating these approaches with Ayurvedic insights offers a more holistic framework for addressing menopause.¹⁴

Aim and Objective

Aim:

To analyze the changes in *Sapta Dhatus* during *Rajonivritti Awastha* (menopause) and explore the role of *Dhatu Sarta Lakshana* in Ayurvedic management.

Objectives:

1. To understand the Ayurvedic perspective of *Sapta Dhatu* in menopause.
2. To correlate menopausal changes with *Dhatu Sarta Lakshana*.

3. To propose integrated Ayurvedic and modern approaches for menopause management.

Material and Methods

Study Design: This is a descriptive study based on Ayurvedic classical texts, modern medical literature, data on menopausal women.

Data Collection:

1. **Ayurvedic Sources:** References from classical Ayurvedic texts such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya* were reviewed to understand *Sapta Dhātu*, *Dhātu Sarta Lakshana*, and their changes during *Rajonivritti Awastha*.
2. **Modern Literature:** Data from contemporary medical studies and journals on menopause were included to correlate Ayurvedic concepts with modern physiology.

Methods:

1. **Assessment of Dhātu Sarta Lakshana:** Ayurvedic parameters were used to evaluate tissue excellence, including physical strength, skin health, and mental stability.
2. **Clinical Symptoms:** Data were collected on menopausal symptoms such as hot flashes, bone density loss, and psychological changes.
3. **Intervention Review:** Ayurvedic interventions like *Rasayana Chikitsa*, dietary modifications, and mental health practices were analyzed for their efficacy.

Analysis:

The collected data were analyzed qualitatively by comparing Ayurvedic insights with modern physiological findings. Observations were interpreted to propose integrative management strategies.

Conceptual Study on Dhātu Sarta

Dhātu Sarta is an Ayurvedic term that refers to the qualitative excellence or optimal state of the seven bodily tissues (*Sapta Dhatus*). It signifies the healthy functioning and structural integrity of each tissue, contributing to physical strength, immunity, mental stability, and overall well-being. The term combines *Dhātu* (tissue) and *Sarta* (excellence), emphasizing the role of balanced tissue health in maintaining harmony within the body and mind.¹⁵

Dhatu Sarta Lakshana

Dhatu	Characteristics of Excellence (<i>Sarta Lakshana</i>)	Impact during Menopause
<i>Rasa Dhatu</i>	Well-hydrated skin, pleasant complexion, efficient nourishment of tissues	Dryness, pallor, reduced nourishment
<i>Rakta Dhatu</i>	Radiant skin, sharp sensory perception, vitality	Fatigue, anemia, loss of vitality
<i>Mamsa Dhatu</i>	Strength, stability, muscular tone	Reduced muscle mass and strength
<i>Meda Dhatu</i>	Proper fat metabolism, lubrication	Fat redistribution, metabolic disorders
<i>Asthi Dhatu</i>	Bone strength, structural integrity	Decline in bone density, osteoporosis
<i>Majja Dhatu</i>	Robust immunity, cognitive clarity, sensory function	Mood swings, cognitive decline, weakened immunity
<i>Shukra/Artava Dhatu</i>	Reproductive health, hormonal balance	Cessation of menstruation, hormonal imbalance

Conceptual Study on Rajonivritti Awastha (Menopause)

Rajonivritti Awastha, or menopause, is a natural phase in a woman's life marked by the cessation of menstruation, signaling the end of reproductive capability. Ayurveda describes this transition as a *Vata-dominant* stage of life, where the natural decline in reproductive function occurs due to the depletion of *Shukra/Artava Dhatu* and changes in the balance of the *Doshas*.¹⁶

Ayurvedic Perspective:

- 1. Cessation of Artava (Menstrual Cycle):** In Ayurveda, *Artava Dhatu* governs the production of menstrual blood and reproductive health. With aging, the *Agnis* (metabolic functions) weaken, and *Artava Dhatu* gradually diminishes, leading to the natural cessation of menstruation.¹⁷
- 2. Dosha Imbalance:** Menopause is associated with the predominance of *Vata Dosha*, specifically *Prana Vata* and *Apana Vata*, leading to symptoms like dryness, joint stiffness, mood swings, and irregular bowel movements. Secondary imbalances in

Pitta and *Kapha* may contribute to hot flashes, weight gain, and metabolic disturbances.¹⁸

3. Impact on Dhatus:

- *Asthi Dhātu*: Reduction in bone density and strength.
- *Meda Dhātu*: Changes in fat metabolism and weight redistribution.
- *Majja Dhātu*: Cognitive and emotional disturbances.
- *Ojas*: Decline in vitality and immunity.

4. **Aging and Ojas Depletion:** The depletion of *Ojas* (essence of vitality) during menopause manifests as fatigue, lack of energy, and reduced skin luster.¹⁹

Modern Review:

From a modern perspective, menopause occurs due to a decline in ovarian function and a decrease in estrogen and progesterone levels. The hormonal changes affect multiple systems, leading to physical, emotional, and psychological symptoms. Osteoporosis, cardiovascular risks, and mood disorders are well-documented conditions linked to menopause.²⁰

Symptoms in Ayurveda and Modern Context:

1. **Hot Flashes:** Attributed to *Pitta* imbalance in Ayurveda; caused by hormonal fluctuations in modern science.²¹
2. **Insomnia and Anxiety:** *Vata* imbalance leads to restlessness, while modern medicine links these to reduced estrogen levels.²²
3. **Joint Stiffness and Bone Loss:** *Asthi Dhātu* depletion aligns with osteoporosis observed in modern medicine.²³

Ayurvedic Management

1. **Rasayana Therapy:** Rasayana therapy focuses on rejuvenating and revitalizing the body by restoring tissue integrity and enhancing overall vitality. It supports the regeneration of *Dhatus* (tissues), improves *Ojas* (vital energy), and slows down the degenerative processes associated with aging. Specific Rasayana formulations like *Chyawanprash* and *Ashwagandha Rasayana* are recommended during menopause to combat fatigue, enhance immunity, and maintain balance.²⁴

2. **Dietary Regimens:** Ayurveda emphasizes the importance of consuming foods that balance *Vata Dosha* and nourish *Asthi Dhātu*. Warm, unctuous, and easily digestible foods such as milk, sesame seeds, ghee, and cooked vegetables are ideal. These foods strengthen the bones, enhance lubrication, and counteract dryness caused by *Vata* aggravation. Meals should be taken at regular intervals to stabilize digestion and metabolism.²⁵

3. **Herbs:**

Certain Ayurvedic herbs play a significant role in managing menopausal symptoms:

- **Ashwagandha:** Helps reduce stress, improve sleep, and restore energy.²⁶
- **Shatavari:** Balances hormones, supports reproductive health, and alleviates hot flashes.²⁷
- **Guduchi:** Strengthens immunity, detoxifies the body, and reduces inflammation.

These herbs can be consumed as powders, decoctions, or in the form of capsules as per an Ayurvedic practitioner's advice.²⁸

4. **Lifestyle Modifications:** Incorporating practices such as yoga, pranayama, and meditation helps balance *Doshas* and improve mental stability. Gentle yoga poses strengthen bones and muscles, while pranayama calms the mind and enhances oxygenation. Meditation reduces stress and improves emotional resilience, making it particularly beneficial for managing mood swings and anxiety during menopause.²⁹

5. **Pathya-Apathya (Diet and Lifestyle):** Ayurveda prescribes specific *Pathya* (favorable) and *Apathya* (unfavorable) practices to manage menopause effectively:

- **Pathya:** Warm, nourishing, and hydrating foods, such as soups, stews, and herbal teas. Adequate hydration and regular consumption of warm water are emphasized.³⁰
- **Apathya:** Avoid cold, dry, and processed foods, as they aggravate *Vata Dosha*. Carbonated drinks, excessive caffeine, and frozen foods should also be minimized.

A disciplined daily routine (*Dinacharya*) and seasonal regimen (*Ritucharya*) are encouraged to maintain balance and harmony in the body.³²

Discussion

Rajo-nivṛtti avastha (menopause) is a natural phase of aging in women, characterized by the cessation of the menstrual cycle. Ayurveda attributes this phase to the dominance of *vāta dosha* due to aging (*vaya*), combined with reduced activity of the *śukra dhātu* (reproductive tissue). Hormonal changes during menopause reflect imbalances in *agni* and *dhātu sārātā*, influencing both physical and psychological health. The depletion of *artava* (menstrual blood) signifies the end of reproductive capability and the start of significant bodily transformations.³³

Menopause induces specific changes in all seven *dhātus*: **Rasa Dhātu:** Decreased *rasa sārātā* leads to dryness of the skin, reduced elasticity, and heightened emotional sensitivity. **Rakta Dhātu:** Weak *rakta sārātā* manifests as fatigue, pallor, and a predisposition to anemia. **Māṃsa Dhātu:** Diminished *māṃsa sārātā* results in muscle weakness and loss of tone. **Medas Dhātu:** Imbalance in *medas sārātā* causes weight gain or fat redistribution, especially around the abdomen. **Asthi Dhātu:** *Asthi sārātā* depletion leads to brittle bones and increased susceptibility to osteoporosis. **Majjā Dhātu:** Reduced *majjā sārātā* impairs cognitive function and memory, with possible nerve-related issues. **Śukra Dhātu:** Decline in *śukra sārātā* becomes apparent as libido diminishes and reproductive capability ceases.³⁴

Women with optimal *dhātu sārātā* experience minimal discomfort during menopause. Indicators of balance include physical strength, good immunity, mental stability, and healthy skin and hair despite aging. Such women may avoid severe menopausal symptoms like hot flashes, excessive dryness, and mood swings.³⁵

Imbalances in *dhātu sārātā* during menopause can lead to a variety of symptoms: *Vāta* aggravation manifests as vaginal dryness, joint pain, and sleep disturbances. *Pitta* imbalance results in irritability, hot flashes, and skin issues. *Kapha* dominance may cause weight gain, lethargy, and fluid retention.³⁶

Mental health is a crucial component of *dhātu sārātā*. Practices like meditation, counseling, and emotional support help women cope with psychological challenges such as mood swings, anxiety, and depression. A balanced mind enhances overall well-being and resilience during menopause.³⁷

Role of *Rajo-Nivṛtti Avastha* (menopause)

The concept of *Dhātu Sāratā* in Ayurveda reflects the quality and functional capacity of the seven *dhātus* (tissues) in the body. At *rajo-nivṛtti avastha* (menopause), the quality of *dhātu sāratā* plays a pivotal role in determining the severity of symptoms and the overall well-being of a woman.³⁸

Maintenance of Physical Strength-Optimal *dhātu sāratā* ensures a well-nourished body capable of withstanding the challenges of menopause. For instance, well-maintained *māṃṣa dhātu* (muscle tissue) and *asthi dhātu* (bone tissue) provide physical strength and protect against common menopausal issues such as muscle weakness and osteoporosis.³⁹

Regulation of Hormonal Balance-The proper functioning of *śukra dhātu* (reproductive tissue) and its associated hormonal balance is vital. While *śukra dhātu* activity naturally declines during menopause, its *sāratā* (purity and strength) can mitigate symptoms like irregular menstruation, hot flashes, and reduced libido.⁴⁰

Preservation of Skin and Hair Health-*Rasa* and *rakta dhātus* contribute to skin hydration, elasticity, and overall vitality. Reduced *sāratā* in these *dhātus* can lead to dryness, wrinkles, and hair loss. Maintaining *dhātu sāratā* helps preserve a youthful appearance and minimize visible signs of aging.⁴¹

Bone and Joint Health-The quality of *asthi dhātu* directly affects bone density and strength. Decreased *asthi sāratā* during menopause often results in joint pain and osteoporosis. Maintaining strong *asthi dhātu* through dietary and lifestyle measures reduces the risk of fractures and supports mobility.⁴²

Cognitive and Nervous System Support-The role of *majjā dhātu* (nervous tissue and bone marrow) is crucial in supporting cognitive functions and emotional stability. Reduced *majjā sāratā* may lead to memory issues, anxiety, or depression. Balanced *majjā dhātu* helps in maintaining mental clarity and emotional resilience.⁴³

Weight Management and Metabolism-The quality of *medas dhātu* (fat tissue) influences metabolism and weight distribution. Imbalances in *medas sāratā* during menopause can cause weight gain or an increase in visceral fat. Maintaining optimal *medas sāratā* promotes a healthy metabolism and prevents obesity-related complications.⁴⁴

Emotional and Psychological Stability-Mental stability, which is linked to *rasa* and *majjā dhātus*, is essential during menopause, a time often associated with mood swings, irritability,

and emotional fluctuations. Optimal *dhātu sārātā* ensures balanced emotional health and helps women adapt to the psychological changes of menopause.⁴⁵

Overall Impact of *Dhātu Sārātā Lakṣaṇa*

The quality of *dhātu sārātā* determines:

- The intensity and type of menopausal symptoms experienced.
- The ability to adapt and cope with physical and emotional changes.
- The potential to maintain health, vitality, and quality of life post-menopause.

By strengthening *dhātus* through Ayurvedic dietary practices, lifestyle modifications, and therapeutic measures, women can reduce menopausal discomfort and enhance their well-being during *rajo-nivṛtti avastha*.⁴⁶

Result According to the Aim

1. Changes in *Sapta Dhātus* During Menopause- Menopause leads to distinct changes in all seven *dhātus*. Depletion of *rasa dhātu* causes dryness and reduced tissue elasticity, while *rakta dhātu* weakness results in fatigue and anemia. Declining *māṃsa dhātu* reduces muscle strength, and imbalance in *medas dhātu* leads to weight gain. *Asthi dhātu* degradation manifests as osteoporosis, while *majjā dhātu* decline affects cognition and emotional stability. The cessation of *śukra dhātu* activity marks the end of hormonal and reproductive functions.⁴⁷

2. Role of *Dhātu Sārātā Lakṣaṇa* in Menopause-The quality of *dhātu sārātā* significantly impacts menopausal symptoms. Women with optimal *dhātu sārātā* experience fewer and milder symptoms, whereas poor *dhātu sārātā* exacerbates discomfort. Maintaining tissue quality through Ayurvedic practices ensures a smoother transition and better overall health during menopause.⁴⁸

3. Ayurvedic Perspective and Management-Ayurveda identifies *vāta* aggravation and *dhātu* depletion as the primary causes of menopausal symptoms. Interventions such as *rasayana* therapy, nourishing diets, and *basti* therapy balance *vāta* and support tissue rejuvenation. Herbs like *shatavari* and *aśvagandhā* strengthen *dhātus*, while practices like yoga and pranayama maintain physical and mental stability.⁴⁹

4. Integrated Approach for Management-Combining Ayurvedic therapies with modern interventions provides holistic menopausal care. Ayurvedic principles address the root

causes of symptoms, while modern practices like HRT, calcium supplementation, and counseling offer symptomatic relief. This integrated approach ensures enhanced quality of life for women during *rajo-nivṛtti avastha*.⁵⁰

Overall Outcome The study establishes the pivotal role of *dhātu sārātā lakṣaṇa* in managing menopause. By integrating Ayurvedic and modern approaches, it is possible to effectively address menopausal challenges, ensuring improved health and well-being.

Result

The analysis of changes in *sapta dhātus* during *rajo-nivṛtti avastha* (menopause) highlights significant insights into the Ayurvedic perspective of menopausal physiology and the role of *dhātu sārātā lakṣaṇa* in its management. Based on the stated objectives, the following results are observed:

Objective 1: Understanding the Ayurvedic Perspective of *Sapta Dhātus* in Menopause

The cessation of *artava* production during menopause signifies the physiological decline in *śukra dhātu* function. This natural process is attributed to the dominance of *vāta dosha* and aging (*vaya*). Each of the seven *dhātus*—*rasa*, *rakta*, *māṃsa*, *medas*, *asthi*, *majjā*, and *śukra*—undergoes specific changes during menopause, impacting both physical and psychological health. *Rasa dhātu* depletion causes dryness and reduced elasticity in tissues. *Asthi dhātu* degradation results in osteoporosis and joint-related issues. *Majjā dhātu* disturbances contribute to cognitive and emotional instability.⁵¹

Objective 2: Correlation of Menopausal Changes with *Dhātu Sārātā Lakṣaṇa*

Women with balanced *dhātu sārātā* experience fewer menopausal symptoms, as their tissues are more resilient to the natural decline. Key observations include: Strong *asthi sārātā* correlates with a lower risk of osteoporosis. Optimal *rasa sārātā* prevents excessive dryness and maintains skin hydration. Balanced *majjā sārātā* supports cognitive clarity and emotional stability.

Conversely, poor *dhātu sārātā* leads to intensified menopausal symptoms, such as hot flashes, mood swings, and reduced physical strength.⁵²

Objective 3: Proposing Integrated Ayurvedic and Modern Approaches for Menopause Management

An integrated approach incorporating Ayurvedic principles and modern medicine can

effectively manage menopausal symptoms and improve quality of life. Proposed strategies include:

- **Ayurvedic Interventions:** Use of *rasayana* herbs like *shatavari*, *aśvagandhā*, and *āmalakī* to rejuvenate *dhātus*. *Basti* therapy to balance *vāta dosha* and support tissue nourishment. Dietary recommendations including ghee, milk, and easily digestible foods to strengthen *dhātus*.⁵³
- **Modern Interventions:** Hormone replacement therapy (HRT) for symptomatic relief, where necessary. Calcium and vitamin D supplementation to counteract *asthi dhātu* depletion. Psychotherapy or counseling for emotional and psychological support.⁵⁴

Conclusion

Menopause, or *rajo-nivṛtti avastha*, is a natural and inevitable phase in a woman's life that brings significant physical and emotional changes. These changes are closely tied to the depletion and transformation of *dhātu sārātā*, which determine the quality of a woman's health during this transition. Ayurveda emphasizes maintaining a balance in the *dhātus* through proper diet, lifestyle adjustments, and therapeutic interventions to ensure minimal discomfort and to enhance overall well-being. By addressing both physical and psychological aspects, Ayurveda offers a comprehensive and individualized approach to navigate menopause, promoting health, vitality, and emotional resilience in this transformative stage of life.

CONFLICT OF INTEREST –NIL

SOURCE OF SUPPORT –NONE

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