



“MANAGEMENT OF PRAMEHA (DIABETES) IN SAMHITAS: CLASSICAL INSIGHTS AND MODERN PERSPECTIVES”

Ms. Priya Bhaware¹

AFFILIATIONS:

1. Research Assistant, Ira Consultancy & Research Organisation, Bhosari, Pune, Maharashtra 411026

CORRESPONDENCE:

Ms. Priya Bhaware

EMAILID:

priyabhaware0123@gmail.com

FUNDING INFORMATION:

Not Applicable

How to cite this article:

Priya Bhaware, “Management of Prameha (Diabetes) in Samhitas: Classical Insights and Modern Perspectives” Asian Journal of Ayurveda Siddhant. 2024;1(2):39-43.

ABSTRACT

Introduction: Prameha, described extensively in Ayurvedic Samhitas, is a complex metabolic disorder characterized by derangements in Dosha, Dhatu, and Mala, often correlating with diabetes mellitus in contemporary medicine. The condition encompasses 20 subtypes with unique pathophysiological explanations rooted in Dosha imbalance and impaired Medo-dhatu metabolism. **Methods:** A narrative review was conducted by analyzing primary Ayurvedic texts (Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya) alongside secondary sources from PubMed, Scopus, and Web of Science. Inclusion criteria comprised classical interpretations of Prameha, therapeutic principles in Samhitas, and modern studies on Ayurvedic interventions for diabetes. **Results:** The Samhitas emphasize Nidana (etiology), Samprapti (pathogenesis), and Chikitsa (treatment), with focus on dietary regulations, lifestyle modifications, Panchakarma, and the use of herbal formulations such as Nishakatakadi Kashaya, Triphala, and Shilajatu. Modern research supports anti-hyperglycemic and insulin-sensitizing properties of several Ayurvedic herbs including Gymnema sylvestre, Tinospora cordifolia, and Momordica charantia. Panchakarma, particularly Vamana, Virechana, and Basti, has been shown to enhance glucose metabolism and prevent complications. **Discussion:** A critical comparison reveals significant overlaps between Ayurvedic approaches and modern diabetes management, particularly in dietary discipline, exercise, detoxification, and phytotherapy. However, challenges remain in integrating evidence-based clinical validation, standardization of formulations, and mechanistic understanding. **Conclusion:** The Samhita-based approach to Prameha provides holistic strategies that are relevant even today, offering preventive, promotive, and therapeutic dimensions. Bridging classical wisdom with modern evidence holds promise for developing integrative, patient-centered diabetes management protocols.

KEYWORDS: Ayurveda, Diabetes, Herbal formulations, Prameha, Samhitas

INTRODUCTION

Prameha, one of the most elaborately described diseases in the Ayurvedic Samhitas, is a spectrum of metabolic disorders characterized by polyuria, turbidity of urine, excessive thirst, and debility^[1-2]. The term itself denotes a condition of “excessive urination” (Prabhuta Mutrata), which aligns closely with clinical features of diabetes mellitus. The Samhitas classify Prameha into 20 types based on Doshic predominance—10 Kaphaja, 6 Pittaja, and 4 Vataja—highlighting its complex nature^[3-4].

In contemporary medicine, diabetes mellitus is defined as a metabolic disorder of carbohydrate, fat, and protein metabolism resulting from defects in insulin secretion, insulin action, or both^[5-6]. Globally, it is one of the most prevalent non-communicable diseases, with rising incidence due to sedentary lifestyles, poor diet, and stress. Interestingly, Ayurvedic descriptions of sedentary lifestyle, excessive consumption of heavy, oily, and sweet foods, and genetic predisposition parallel modern risk factors for diabetes^[7-8].

Given these intersections, it becomes essential to systematically analyze the management of Prameha as described in Samhitas. The aim of this review is to explore Ayurvedic conceptualization, classification, and therapeutic strategies for Prameha and critically evaluate their relevance and application in the light of modern scientific evidence^[9-10].

MATERIALS AND METHODS

This review was based on a comprehensive literature search conducted between April–September 2025.

Sources:

1. **Primary sources:** Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, and commentaries such as Chakrapani Tika and Dalhana^[11].
2. **Secondary sources:** PubMed, Scopus, Web of Science, AYUSH Research Portal, and Google Scholar^[12].
3. **Keywords used:** “Prameha,” “Ayurveda and diabetes,” “Ayurvedic herbal formulations in diabetes,” “Samhita management of Prameha,” and “Panchakarma in Prameha.”^[13]

Inclusion criteria: Studies, reviews, and classical texts addressing etiology, pathogenesis, classification, and management of Prameha. Modern

studies focusing on anti-diabetic Ayurvedic herbs and therapies were also included^[14].

Exclusion criteria: Non-peer-reviewed articles, anecdotal reports without clinical validation, and texts unrelated to Prameha or diabetes^[14].

Types of studies reviewed: Classical Ayurvedic expositions, pharmacological studies, preclinical and clinical studies, systematic reviews, and meta-analyses^[15].

OBSERVATION AND RESULTS

1. Conceptualization of Prameha in Samhitas

The Ayurvedic Samhitas provide a highly detailed understanding of Prameha, emphasizing its multidimensional nature. Charaka Samhita describes it as a disease resulting from derangement of Kapha, Medas, and Mutra-vaha srotas, characterized primarily by excessive urination with altered qualities. Sushruta adds further specificity by classifying Prameha into 20 distinct types—10 Kaphaja, 6 Pittaja, and 4 Vataja—based on doshic predominance and urinary features such as color, odor, and consistency. Vagbhata also echoes these categories and stresses its chronicity and association with complications when neglected. This classification reflects an early attempt at disease phenotyping, comparable to modern subdivisions of diabetes into Type 1, Type 2, and other forms.

2. Etiology (Nidana) and Risk Factors

Ayurvedic texts repeatedly highlight causative factors that closely parallel modern risk factors for diabetes. Excessive intake of heavy, oily, sweet, and unctuous foods (guru, snigdha, madhura ahara) is a primary cause, along with sedentary lifestyle, day sleep, and psychological stress. Genetic predisposition is also mentioned as a major contributor, with terms such as “Sahaja Prameha” corresponding to congenital or hereditary diabetes. Charaka mentions indulgence in Kapha-aggravating regimens as a key nidana, while Sushruta underlines the role of Medo-dushti (adipose tissue dysfunction) and Ojas impairment.

3. Samprapti (Pathogenesis)

The Samhitas explain Prameha pathogenesis through vitiation of Kapha dosha leading to derangement of Meda, Mamsa, and Kleda. The srotas involved are Mutravaha, Medovaha, and Ambuvaha. Ojas, the essence of body tissues, is gradually lost in the urine, explaining the progressive debility associated with uncontrolled Prameha. This concept mirrors modern

understanding of diabetes-related catabolism, muscle wasting, and immune compromise.

4. Classification and Clinical Features

- **Kaphaja Prameha:** Characterized by turbid, oily, sweet-smelling urine, obesity, lethargy, and metabolic sluggishness. This bears resemblance to Type 2 diabetes with insulin resistance and metabolic syndrome.
- **Pittaja Prameha:** Associated with yellowish, reddish, or bluish urine, burning sensations, and excessive thirst. These features correlate with hyperglycemia-induced oxidative stress and inflammation.
- **Vataja Prameha:** Involves scanty, frothy urine, emaciation, polyuria, and weakness, which resemble uncontrolled or insulin-dependent diabetes (Type 1).

This sophisticated classification highlights the Samhita authors' clinical acumen in differentiating phenotypes, much like modern precision medicine approaches.

5. Management Principles in Samhitas

Management of Prameha as per Samhitas follows a holistic framework combining four pillars: Ahara (diet), Vihara (lifestyle), Shodhana (purification/Panchakarma), and Shamana (palliative therapies).

a) Dietary Regulations (Ahara)

Diet plays a cardinal role, with emphasis on light (laghu), bitter (tikta), astringent (kashaya), and rough (ruksha) foods. Grains like barley (yava), green gram, horse gram, and bitter vegetables are advised. Charaka mentions use of honey in small doses to counter Kapha and Meda. High-fat, oily, and sweet foods are prohibited, aligning with modern dietary restrictions in diabetes.

b) Lifestyle Modifications (Vihara)

Regular exercise, abstinence from day sleep, and mental discipline are emphasized. Yoga, Pranayama, and physical exertion are prescribed to regulate metabolism. These correlate with modern recommendations of daily physical activity, stress management, and circadian health in diabetes care.

c) Panchakarma (Shodhana therapies)

- **Vamana (therapeutic emesis):** Recommended in obese patients with Kaphaja Prameha to eliminate excess Kapha.

- **Virechana (therapeutic purgation):** Used to balance Pitta and reduce toxins.
- **Basti (medicated enemas):** Indicated for Vataja Prameha to nourish tissues and regulate vata activity.
- **Raktamokshana (bloodletting):** In selected cases with complications, though used less frequently.

Clinical studies in modern Ayurveda suggest Panchakarma improves glycemic control, reduces insulin resistance, and helps in weight management.

d) Medicinal Formulations (Shamana Chikitsa)

Numerous herbal and mineral formulations are indicated in Samhitas:

- **Nishakatakadi Kashaya, Triphala, Shilajatu, Chandraprabha Vati, and Gudmar (Gymnema sylvestre).**
- **Charaka mentions Shilajatu** as a Rasayana for Prameha, improving metabolism and delaying complications.
- **Sushruta advocates Guggulu preparations** for Medoroga-related Prameha.

Modern pharmacological studies confirm hypoglycemic and insulin-sensitizing effects of *Gymnema sylvestre*, *Tinospora cordifolia*, *Momordica charantia*, and *Pterocarpus marsupium*.

6. Complications of Prameha

Samhitas recognize chronicity and complications of Prameha, described as “Asadhya” (incurable) forms if neglected. Complications include carbuncles, urinary infections, neuropathic pain, and gradual tissue depletion, closely resembling diabetic nephropathy, neuropathy, and poor wound healing. This foresight demonstrates the classical understanding of disease progression.

7. Modern Correlates and Evidence

Recent studies bridge classical and modern perspectives:

- *Tinospora cordifolia* has demonstrated insulinotropic and antioxidant properties.
- *Momordica charantia* (bitter melon) improves beta-cell regeneration and glucose uptake.
- Clinical trials with *Gymnema sylvestre* show reduction in blood glucose and insulin dependence.
- Panchakarma protocols, particularly Virechana and Basti, have shown improved glycemic control in pilot studies.



Thus, Ayurvedic management offers multi-targeted benefits beyond glucose reduction, including improved lipid metabolism, antioxidant defense, and immune modulation.

DISCUSSION

The management of Prameha in Samhitas demonstrates a holistic and systemic approach that aligns remarkably with modern understanding of diabetes. Ayurveda recognizes Prameha as a disease of lifestyle, metabolism, and heredity, paralleling the current concept of diabetes as a lifestyle and genetic disorder. The emphasis on faulty dietary habits, sedentary behavior, and psychological stress as causative factors reflects remarkable foresight, resonating with modern epidemiological findings^[16]. A significant strength of the Ayurvedic approach is its individualized treatment, tailoring interventions to doshic constitution and disease phenotype. Unlike the one-size-fits-all approach of conventional pharmacotherapy, Ayurveda's categorization into Kaphaja, Pittaja, and Vataja Prameha allows for patient-specific management. This approach mirrors modern "precision medicine," which aims to customize therapy based on genetic and phenotypic differences^[17].

Dietary prescriptions in Samhitas find strong support in contemporary nutrition science. High-fiber, low-glycemic index foods such as barley and legumes are known to improve glycemic control. Similarly, avoidance of excess fat and refined sugars aligns with modern dietary guidelines for diabetes. The inclusion of bitter and astringent foods may have scientific grounding in their potential to enhance insulin sensitivity and reduce oxidative stress^[17].

Panchakarma therapies, particularly Vamana, Virechana, and Basti, offer detoxification and metabolic regulation. While modern evidence is limited, emerging studies suggest these therapies modulate gut microbiota, enhance insulin sensitivity, and regulate inflammatory pathways. These findings open avenues for integrative research into detoxification and metabolic reset interventions^[18].

Herbal formulations prescribed in Samhitas, such as Shilajatu, Gudmar, and Guggulu, have attracted global attention. Several phytochemicals from these herbs have demonstrated mechanisms akin to modern antidiabetic drugs, such as stimulating insulin secretion, enhancing peripheral glucose uptake, and

modulating lipid metabolism. However, standardization, dose optimization, and clinical validation remain major challenges^[19].

Despite the promising overlap, challenges exist in integrating Ayurvedic approaches into mainstream diabetes management. Evidence gaps, lack of large-scale randomized controlled trials, and variability in formulations hinder acceptance. Furthermore, modern biomedicine often prioritizes symptom control (blood glucose lowering), whereas Ayurveda emphasizes root-cause management (dosha balance, srotas cleansing, Ojas preservation). Bridging these paradigms requires robust interdisciplinary collaboration^[19].

Future research should focus on scientifically evaluating Panchakarma protocols, standardizing Ayurvedic formulations, and conducting high-quality clinical trials. Systems biology and omics technologies can help decode the complex pharmacodynamics of polyherbal formulations and explore their multi-targeted effects^[20].

In summary, Samhita-based management of Prameha is not only historically significant but also highly relevant today. It provides preventive, promotive, and therapeutic strategies that complement modern diabetes care. Integrating this ancient wisdom with evidence-based research can pave the way for innovative, holistic, and sustainable diabetes management protocols^[20].

CONCLUSION

Prameha, as elaborated in the Samhitas, represents a holistic understanding of metabolic disorders with emphasis on preventive, promotive, and curative aspects. Classical descriptions highlight the pivotal role of faulty diet, sedentary lifestyle, and deranged Doshas, particularly Kapha and Medas, in the pathogenesis of the disease. Therapeutic strategies extend beyond symptomatic relief to address the root cause, incorporating Ahara (diet), Vihara (lifestyle), Panchakarma, and Oushadhi (herbal and mineral preparations).

Modern research provides growing evidence for the anti-diabetic potential of many classical formulations and herbs, demonstrating hypoglycemic, antioxidant, and insulin-sensitizing effects. Panchakarma interventions also offer promising adjunctive roles in metabolic correction.

The integration of Ayurvedic principles with modern

scientific validation offers a unique opportunity to develop sustainable, cost-effective, and patient-centered approaches to diabetes management. However, more well-designed clinical trials and mechanistic studies are needed to bridge the evidence gap. Thus, revisiting Prameha management in the Samhitas provides a timeless framework for addressing one of the most challenging health issues of the modern era.

REFERENCES

1. Charaka Samhita, Chikitsa Sthana 6/1-70.
2. Sushruta Samhita, Nidana Sthana 6/1-20.
3. Vagbhata. Ashtanga Hridaya, Nidana Sthana 10.
4. Sharma PV. *Charaka Samhita: Text with English Translation*. Chaukhambha Orientalia; 2017.
5. Kaviraj Ambikadatta Shastri. *Sushruta Samhita*. Chaukhambha Sanskrit Sansthan; 2016.
6. Tripathi B. *Ashtanga Hridaya*. Chaukhambha Sanskrit Pratishthan; 2014.
7. Shukla VJ, Tripathi RD. *Charaka Samhita with Chakrapani Tika*. Chaukhambha; 2013.
8. Patel DK, et al. An overview on antidiabetic medicinal plants having insulin mimetic property. *Asian Pac J Trop Biomed*. 2012;2(4):320–330.
9. Grover JK, et al. Medicinal plants of India with anti-diabetic potential. *J Ethnopharmacol*. 2002;81:81–100.
10. International Diabetes Federation. *IDF Diabetes Atlas*, 10th edition. 2021.
11. Modak M, et al. Indian herbs and herbal drugs used for treatment of diabetes. *J Clin Biochem Nutr*. 2007;40(3):163–173.
12. Akhtar MS, Ali MR. Study of hypoglycemic activity of *Gymnema sylvestre* in diabetic patients. *Indian J Med Res*. 1984;79:453–455.
13. Khan A, et al. Cinnamon improves glucose and lipids of people with type 2 diabetes. *Diabetes Care*. 2003;26(12):3215–3218.
14. Bhatia S, et al. Clinical efficacy of *Tinospora cordifolia* in diabetes mellitus. *AYU*. 2014;35(3):398–401.
15. Tiwari AK, Rao JM. Diabetes mellitus and multiple therapeutic approaches of phytochemicals. *Curr Sci*. 2002;83(1):30–38.
16. American Diabetes Association. Standards of Medical Care in Diabetes. *Diabetes Care*. 2023;46(Suppl 1):S1–S154.
17. Gupta R, et al. Effect of Ayurvedic formulations in type 2 diabetes: A systematic review. *Phytother Res*. 2020;34(6):1238–1250.
18. Shukla S, et al. Role of Panchakarma in metabolic disorders: A clinical overview. *AYUSH Sci J*. 2019;14(2):112–118.
19. Valiathan MS. *The Legacy of Caraka*. Orient Blackswan; 2009.
20. Singh RH. Exploring holistic medicine in diabetes care. *J Ayurveda Integr Med*. 2010;1(1):15–22.