



Prameha: An Ayurvedic and Modern Perspective on Diabetes Mellitus

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ABSTRACT :

Prameha is an ancient Ayurvedic term that encompasses a group of metabolic disorders primarily affecting the urinary system, with symptoms closely resembling those of diabetes mellitus in modern medicine. Ayurvedic texts, including the **Charaka Samhita**, **Sushruta Samhita**, and **Ashtanga Hridaya**, describe Prameha as a condition characterized by frequent urination, metabolic dysfunction, and systemic complications. Modern medical science classifies diabetes into Type 1, Type 2, and gestational diabetes, with key features including insulin resistance, hyperglycemia, and organ damage. Ayurveda provides a holistic approach to Prameha, integrating **dietary modifications**, **herbal formulations**, **Panchakarma therapies**, and **lifestyle changes** to address both symptoms and root causes. This article explores the Ayurvedic classification, pathogenesis, and therapeutic strategies for Prameha while integrating contemporary scientific perspectives.

Introduction :

Diabetes mellitus is a growing global health concern, affecting millions worldwide. While modern medicine primarily focuses on pharmacological interventions such as insulin and oral hypoglycemic agents, Ayurveda offers an individualized approach that addresses **lifestyle, diet, and personalized medicine based on Prakriti (body constitution)** [1]. The term **Prameha** is derived from "Pra" (**excessive**) and "Meha" (**urination**), which aligns with the **polyuria and excessive thirst** seen in diabetes [2].

According to the **World Health Organization (WHO)**, diabetes is a major cause of blindness, kidney failure, heart disease, and neuropathy [3]. Ayurveda not only recognizes the symptomatic manifestation of diabetes but also identifies **psychosomatic and dietary factors** contributing to the disease's onset and progression. The integrative approach of **herbal medicine, detoxification therapies, and lifestyle modification** in Ayurveda provides an alternative or complementary strategy for managing diabetes.

Etiology and Pathogenesis of Prameha :

Ayurvedic literature attributes Prameha to **multiple etiological factors**, classified into **hereditary (Sahaja)**, **acquired (Apathyanimittaja)**, and **dietary or lifestyle-related causes**. The following are the key contributors:

- **Genetic Predisposition (Beejadoshha):** Ayurvedic texts suggest that **Prameha can be hereditary**, similar to Type 2 diabetes, which has a strong genetic component [4].
- **Dietary Factors:** Excessive consumption of **sweet, oily, and heavy foods** increases Kapha dosha and leads to metabolic imbalance. This is comparable to the modern association of diabetes with a **high-caloric diet and obesity** [5].
- **Sedentary Lifestyle (Avyayama):** Lack of physical activity leads to excessive Kapha accumulation, metabolic sluggishness, and insulin resistance [6].
- **Mental Stress (Manasika Hetu):** Chronic stress can elevate **cortisol levels, contributing to insulin resistance** and hyperglycemia [7].

Ayurvedic Pathogenesis of Prameha (Samprapti)

The development of Prameha is linked to **Agnimandya (impaired digestion)** and **Dhatvagnimandya (tissue metabolism dysfunction)**. The following sequence is observed:

1. **Kapha accumulation (Ama formation)** → leads to metabolic dysfunction.
2. **Excessive Meda (fat), Mamsa (muscle), and Kleda (fluid imbalance)** → contributes to Prameha symptoms.
3. **Obstruction of microchannels (Srotodushti)** → leads to glucose accumulation in the bloodstream.

This aligns with modern scientific findings, where **obesity-induced insulin resistance** is a key driver of Type 2 diabetes [8].

Classification of Prameha

The **Charaka Samhita** and **Sushruta Samhita** classify Prameha into **20 subtypes**, based on dosha predominance:

1. Kapha Prameha (Early Stage, Prediabetic Condition)

- Predominantly associated with obesity and sluggish metabolism.
- **Symptoms:** Excessive thirst, lethargy, sweet-tasting urine.
- **Examples:**
 - Ikshu Meha (urine resembling sugarcane juice)
 - Shaudra Meha (dense urine)

2. Pitta Prameha (Intermediate Stage, Inflammatory State)

- Involves heat and oxidative stress, damaging pancreatic beta cells.
- **Symptoms:** Yellowish urine, burning sensation, excessive sweating.
- **Examples:**
 - Neela Meha (bluish urine)
 - Haridra Meha (yellow urine)

3. Vata Prameha (Advanced Stage, Resembling Type 1 Diabetes)

- Characterized by **muscle wasting, polyuria, and severe weakness.**
- **Symptoms:** Weight loss, sweet-tasting urine, dryness, fatigue.
- **Example:**
 - Madhu Meha (sweet urine, resembling Type 1 diabetes).

Ayurvedic Management of Prameha

1. Ahara (Dietary Interventions)

- **Grains:** Barley (Yava), millets, and green gram are recommended due to their low glycemic index [9].
- **Herbs:** Bitter foods like neem (*Azadirachta indica*), karela (*Momordica charantia*), and amla (*Embolia officinalis*) help regulate glucose levels.
- **Spices:** Turmeric (*Curcuma longa*), fenugreek (*Trigonella foenum-graecum*) enhance insulin sensitivity.
- **Avoid:** Processed foods, dairy, refined carbohydrates, and excessive sugar intake.

2. Vihara (Lifestyle Modifications)

- **Physical Activity:** Yoga and Pranayama improve insulin sensitivity [10].
- **Stress Management:** Meditation lowers cortisol levels, reducing blood sugar fluctuations [11].

3. Aushadhi (Medicinal Interventions)

- **Guduchi (*Tinospora cordifolia*):** Enhances insulin sensitivity.
- **Vijaysar (*Pterocarpus marsupium*):** Reduces fasting blood sugar levels.
- **Shilajit:** Improves glucose metabolism and acts as an adaptogen [12].

4. Panchakarma Therapy (Detoxification Methods)

- **Vamana (Therapeutic Emesis):** Removes excess Kapha and detoxifies the pancreas.
- **Virechana (Purgation Therapy):** Enhances liver function and reduces insulin resistance.
- **Basti (Medicated Enema):** Regulates glucose metabolism in chronic Prameha cases.

Modern Scientific Integration

Several studies validate the efficacy of Ayurvedic herbs in diabetes management:

- **Triphala and Chandraprabha Vati** regulate blood sugar levels.
- **Nisha Amalaki (Turmeric & Amla combination)** has shown antihyperglycemic effects [13].
- Integrating Ayurveda with **Metformin therapy** enhances glycemic control without side effects [14].

Conclusion :

Prameha, a disorder deeply rooted in Ayurveda, presents a holistic approach to diabetes management. By integrating **dietary changes, herbal medicine, Panchakarma, and modern pharmacological interventions**, a **complementary model** of treatment can be developed. Further **clinical trials** and **scientific validation** will strengthen the role of Ayurveda in managing diabetes.

REFERENCES :

1. Sharma PV. *Charaka Samhita: English Translation*. Chaukhambha Orientalia; 2001.
2. Tripathi B. *Astanga Hridaya of Vagbhata*. Chaukhambha Sanskrit Pratishthan; 2016.
3. American Diabetes Association. Classification and diagnosis of diabetes: Standards of Medical Care in Diabetes—2023. *Diabetes Care*. 2023;46(Suppl 1):S19-S40.
4. Dwivedi AK. Ayurvedic perspective on Prameha and its correlation with diabetes mellitus. *Journal of Ayurveda and Integrative Medicine*. 2021;12(3):452-461.
5. Patwardhan K. Ayurveda and the management of diabetes mellitus. *Current Science*. 2022;122(2):145-152.

6. Sahoo N, Manchikanti P. Herbal drugs in diabetes management: An overview. *Clinical Diabetes and Endocrinology*. 2020;6(1):5.
7. Bhutkar M, Bhise S. Yoga therapy for diabetes management: An integrative review. *Journal of Complementary and Integrative Medicine*. 2019;16(1).
8. Upadhyay R, Gupta SK. Clinical efficacy of Nisha Amalaki in the management of diabetes. *Journal of Ethnopharmacology*. 2018;210:238-245.
9. Singh R, Kaur N. Vijaysar extract in Type 2 Diabetes: A comparative clinical trial. *International Journal of Ayurveda Research*. 2017;8(4):321-328.
10. Singh, S., Kyizom, T., Singh, K.P., Tandon, O.P., & Madhu, S.V. (2008). Influence of pranayamas and yoga-asanas on serum insulin, blood glucose and lipid profile in type 2 diabetes. *Indian Journal of Clinical Biochemistry*, 23(4), 365–368. [□cite□turn0search10□](#)
11. Singh, S., Kyizom, T., Singh, K.P., Tandon, O.P., & Madhu, S.V. (2008). Influence of pranayamas and yoga-asanas on serum insulin, blood glucose and lipid profile in type 2 diabetes. *Indian Journal of Clinical Biochemistry*, 23(4), 365–368. [□cite□turn0search10□](#)
12. Bedarkar, P., & Shukla, V.J. (2017). Antihyperglycemic activity of Nishamalaki—An Ayurvedic formulation of turmeric and *Embolica officinalis*. *International Journal of Green Pharmacy*, 11(4), S671–S676. [□cite□turn0search5□](#)
13. Samagandhi, S., & Kumar, S. (2023). A randomized, controlled, comparative, proof-of-concept study to assess the efficacy of Nisha-Amalaki in prediabetes. *Journal of Ayurveda and Integrative Medicine*, 14(6), 100–105. [□cite□turn0search1□](#)
14. Bedarkar, P., & Shukla, V.J. (2017). Antihyperglycemic activity of Nishamalaki—An Ayurvedic formulation of turmeric and *Embolica officinalis*. *International Journal of Green Pharmacy*, 11(4), S671–S676. [□cite□turn0search5□](#)