

# Integrative Review of Prameha Complications and Diabetes Mellitus.

**Dr. Anand V. Kalaskar<sup>1</sup>, Dr. Umesh B. Pawar<sup>2</sup>, Dr. Nikita K. Raskar<sup>3</sup>**

M.D. Kayachikitsa - Vikriti Vigyan (BHU) and Associative Professor<sup>1</sup>

MD Scholar, PG Department of Rog Nidana Evum Vikriti Vigyan<sup>2</sup>

MD Scholar, PG Department of Rog Nidana Evum Vikriti Vigyan<sup>3</sup>

Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune, India

**Abstract:** *Prameha is a group of urinary and metabolic disorders described in Ayurvedic classical literature. It is characterized by excessive urination and alteration in the quantity and quality of urine. Madhumeha, generally described among the Vataja varieties of Prameha, is commonly correlated with diabetes mellitus, particularly type 2 diabetes mellitus.*

*Ayurveda describes several complications, or Upadrava, of Prameha, including excessive thirst, diarrhoea, fever, burning sensation, weakness, loss of appetite, indigestion, suppurative lesions, abscesses and tissue destruction. These features can be clinically compared with modern diabetic complications such as dehydration, gastrointestinal dysfunction, infection, diabetic neuropathy, diabetic foot ulcer, abscess, impaired wound healing and chronic metabolic debility.*

*The present review analyses the Ayurvedic description of Prameha Upadrava and discusses its possible correlation with complications of diabetes mellitus. The Ayurvedic concepts of Dosha, Dushya, Agni, Kleda, Srotas and Ojas provide a broad framework for understanding the systemic nature of Prameha. However, Ayurvedic terms and modern biomedical diagnoses should not be considered identical. Accurate diagnosis requires both Ayurvedic clinical assessment and appropriate contemporary investigations..*

**Keywords:** Prameha, Madhumeha, Upadrava, diabetes mellitus, diabetic neuropathy, diabetic foot, Prameha Pidaka, Ayurveda.

## I. INTRODUCTION

Prameha is an important disease group described in Ayurveda. The principal features of Prameha are Prabhuta Mutrata and Avila Mutrata, which refer to excessive and abnormal urination. The disease is associated with the involvement of Dosha, Dushya, Agni, Kleda and Mutravaha Srotas.

Madhumeha is commonly correlated with diabetes mellitus because both conditions may present with polyuria, polydipsia, weakness, burning sensation, weight changes and chronic metabolic disturbance. However, Prameha is a wider Ayurvedic disease classification comprising twenty varieties, whereas diabetes mellitus is classified in modern medicine into type 1, type 2, gestational and other specific types.

Diabetes mellitus is a chronic metabolic disorder caused by inadequate insulin secretion, insulin resistance or both. Persistent hyperglycaemia may cause damage to the eyes, kidneys, nerves, heart and peripheral blood vessels. The complications of diabetes are often progressive and may remain asymptomatic in the early stages.

Ayurvedic literature describes Prameha Upadrava in considerable detail. These descriptions are relevant for understanding the possible association between Prameha and modern diabetic complications, particularly neurological, infectious, dermatological, renal and vascular complications.

### AIM -

To review the Ayurvedic complications of Prameha and analyse their possible clinical correlation with modern complications of diabetes mellitus.

Copyright to IJARSCT  
[www.ijarsct.co.in](http://www.ijarsct.co.in)



DOI: 10.48175/IJARSCT-38160



542

**OBJECTIVES -**

- To describe the Ayurvedic concept of Prameha Upadrava.
- To review the classical references related to Prameha complications.
- To explain the Ayurvedic pathogenesis of complications.
- To correlate selected Ayurvedic complications with modern diabetic complications.

**REVIEW OF LITERATURE**

- AYURVEDIC REVIEW
- MODERN REVIEW

**AYURVEDIC REVIEW -****1) Definition of Prameha –**

**प्रभूताविलमूत्रत्वं प्रमेहे सर्वसाधारणम्। (च.नि. ४/५)**

Prameha is characterized by excessive urine formation and abnormal urine quality. It may involve changes in the colour, smell, consistency, quantity and other properties of urine.

Excessive and turbid urination is common to all types of Prameha.

This feature may be compared clinically with polyuria and altered urinary characteristics, although it is not sufficient by itself to diagnose diabetes mellitus.

**2) Classification of Prameha –**

**दश श्लेष्मकृता यस्मात् प्रमेहाः षट् च पित्तजाः।  
यथा च वायुश्चतुरः प्रमेहान् कुरुते बली॥ (च.नि. ४/५४)**

Ayurveda describes twenty types of Prameha according to the predominance of Dosha:

- Ten Kaphaja Prameha.
- Six Pittaja Prameha.
- Four Vataja Prameha.

The classification shows that Prameha is not a single disease. It represents a group of disorders with different Dosha, Dushya and clinical characteristics.

**Dosha and Dushya –**

**कफः सपित्तः पवनश्च दोषा मेदोऽस्रशुक्राम्बुवसालसीकाः।  
मज्जा रसौजः पिशितं च दूष्याः प्रमेहिणां विशतिरेव मेहाः॥ (च.चि. ६/८)**

Prameha involves all three Doshas, although Kapha is particularly

important in the initial stage. The chief Dushyas include Meda, Mamsa, Rasa, Rakta, Kleda, Vasa, Majja, Shukra and Ojas.

Kapha, Pitta and Vata are the Doshas involved in Prameha. Meda, Rakta, Shukra, Ambu, Vasa, Lasika, Majja, Rasa, Ojas and Mamsa are the principal Dushyas.

Prameha is a systemic disorder involving multiple tissues and body fluids. This can be compared conceptually with the multisystem effects of chronic diabetes mellitus.



**3) Nidana of Prameha –**

आस्यासुखं स्वप्नसुखं दधीनि ग्राम्यौदकानूपरसाः पयांसि।  
नवान्नपानं गुडवैकृतं च प्रमेहहेतुः कफकृच्च सर्वम्॥ (च.चि. ६/४)

The main causative factors increase Kapha, Meda and Kleda. These include excessive consumption of heavy, oily and sweet food, excessive sleep, sedentary habits and lack of exercise.

- Excessive intake of Madhura, Guru and Snigdha food.
- Overeating and frequent consumption of calorie-dense food.
- Excessive intake of milk products and sweet preparations.
- Lack of exercise.
- Prolonged sitting.
- Day sleep.
- Obesity.
- Hereditary susceptibility.
- Disturbed sleep and lifestyle.
- Chronic psychological stress.

These factors may result in Agnimandya, Medo-dushti, Kleda vriddhi and Srotorodha. In contemporary medicine, similar factors are associated with obesity, insulin resistance and type 2 diabetes mellitus.

**4) Purvarupa –**

शीतप्रियत्वं गलतालुशोषो माधुर्यमास्ये करपाददाहः।  
भविष्यतो मेहगदस्य रूपं मूत्रेऽभिधावन्ति पिपीलिकाश्च॥ (च.चि. ६/१४)

The Purvarupa of Prameha include: Excessive sweating, Abnormal body odour, Looseness or flabbiness of the body, Excessive sleep, Dryness of the throat and palate, Sweet taste in the mouth, Burning sensation of the hands and feet, Numbness, Excessive thirst, Drowsiness, Abnormal urine, Attraction of ants towards urine.

**5) Samprapti of Prameha –**

मेदश्च मांसं च शरीरजं च क्लेदं कफो बस्तिगतं प्रदूष्य।  
करोति मेहान् समुदीर्णमुष्णैस्तानेव पित्तं परिदूष्य चापि॥

क्षीणेषु दोषेष्ववकृष्य बस्तौ धातून् प्रमेहाननिलः करोति।  
दोषो हि बस्तिं समुपेत्य मूत्रं सन्दूष्य मेहाञ्जनयेद्यथास्वम्॥ (च.चि. ६/५-६)

The Ayurvedic pathogenesis of Prameha may be explained as follows:

1. Excessive intake of Kapha-increasing food and performance of sedentary activities.
2. Aggravation of Kapha and impairment of Agni.
3. Vitiation and accumulation of Meda.
4. Increase in Kleda and abnormal nourishment of Mamsa and other Dhatus.
5. Obstruction of the channels.
6. Involvement of Mutravaha Srotas and Basti.
7. Excessive and abnormal urination.
8. In chronic disease, aggravation of Vata and depletion of Dhatus.
9. Development of Madhumeha with weakness and Ojas depletion.



## 6) Madhumeha

कषायमधुरं पाण्डु रूक्षं मेहति यो नरः ।  
वातकोपादसाध्यं तं प्रतीयान्मधुमेहिनम्॥ (च.नि. ४/४४)

Madhumeha is generally described under Vataja Prameha. In this condition, the urine is described as sweet, pale and ununctuous. It is commonly correlated with diabetes mellitus, particularly type 2 diabetes mellitus.

A person who passes urine that is astringent, sweet, pale and ununctuous is described as suffering from Madhumeha caused by aggravated Vata.

The term Madhumeha should not be equated automatically with all types of diabetes. Type 1 diabetes, gestational diabetes and secondary diabetes require separate contemporary diagnosis and management.

### Pathogenesis of Prameha Complications

The development of complications may be understood through the following sequence:

1. Excessive intake of Guru, Snigdha and Madhura Ahara.
2. Lack of exercise and excessive sleep.
3. Aggravation of Kapha and impairment of Agni.
4. Abnormal accumulation of Meda and Kleda.
5. Involvement of Mamsa, Rasa, Rakta and other Dushyas.
6. Obstruction and dysfunction of Srotas.
7. Involvement of Mutravaha Srotas and Basti.
8. Chronic progression and aggravation of Vata.
9. Dhatu Kshaya and Ojas depletion.
10. Development of Upadrava.

Conceptually, this progression may be compared with obesity, insulin resistance, chronic hyperglycaemia, microvascular injury, tissue damage, impaired immunity and poor wound healing. However, this comparison should not be regarded as a direct biomedical equivalence.

## 7) Classical Description of Prameha Upadrava

उपद्रवास्तु खलु प्रमेहिणां तृष्णातिसारज्वरदाहदौर्बल्यारोचकाविपाकाः पूतिमांसपिडकालजीविद्रव्यादयश्च  
तत्प्रसङ्गाद्भवन्ति॥ (च.नि. ४/४८)

The complications of Prameha include excessive thirst, diarrhoea, fever, burning sensation, weakness, loss of appetite, indigestion, Putimamsa Pidaka, Alaji, Vidradhi and similar disorders.

### Ayurvedic Complications and Modern Correlation

| Ayurvedic Upadrava | Ayurvedic meaning | Possible modern correlation                                          |
|--------------------|-------------------|----------------------------------------------------------------------|
| Trishna            | Excessive thirst  | Polydipsia due to hyperglycaemia and dehydration                     |
| Atisara            | Diarrhoea         | Gastrointestinal disturbance, infection or autonomic dysfunction     |
| Jwara              | Fever             | Urinary, skin, foot or systemic infection                            |
| Daha               | Burning sensation | Diabetic peripheral neuropathy, inflammation or infection            |
| Daurbalya          | General weakness  | Chronic hyperglycaemia, dehydration, malnutrition or catabolic state |
| Arochaka           | Loss of appetite  | Infection, metabolic disturbance or gastrointestinal illness         |
| Avipaka            | Indigestion       | Dyspepsia or delayed gastric emptying                                |



|                  |                                    |                                                               |
|------------------|------------------------------------|---------------------------------------------------------------|
| Putimamsa Pidaka | Putrefactive or suppurative lesion | Diabetic carbuncle, infected ulcer or diabetic foot infection |
| Alaji            | Painful inflammatory lesion        | Severe inflammatory skin lesion or abscess                    |
| Vidradhi         | Abscess                            | Localized bacterial infection or deep abscess                 |
| Mamsa Paka       | Tissue decomposition               | Necrosis, gangrene or severe diabetic foot infection          |
| Ojas Kshaya      | Depletion of vitality              | Chronic debility and reduced physiological resilience         |

These associations are clinical and conceptual. For example, Daha may suggest neuropathy, but diabetic neuropathy must be confirmed by neurological examination and appropriate clinical assessment.

#### A) Prameha Pidaka -

Prameha Pidaka is one of the most clinically important complications described in Prameha. It refers to inflammatory, painful, suppurative or destructive lesions occurring in a patient with Prameha.

Relevant classical terminology- Putimamsa Pidaka, Alaji, Vidradhi, Mamsa Paka.

Possible modern correlations-

Prameha Pidaka may be compared with: Furuncle, Carbuncle, Cellulitis, Deep abscess, Infected diabetic ulcer, Diabetic foot infection, Necrotic or gangrenous tissue.

The Ayurvedic descriptions of Prameha Pidaka and related lesions have been discussed in modern Ayurvedic literature as possible correlates of diabetic carbuncle and diabetic foot disease.

#### Clinical significance

Diabetic foot disease develops commonly through the combined effects of: Peripheral neuropathy, Reduced protective sensation, Peripheral arterial disease, Repeated unnoticed trauma, Infection, Delayed wound healing, Poor glycaemic control.

A non-healing wound, blackening of tissue, foul-smelling discharge, fever, increasing swelling or loss of sensation requires urgent medical attention.

#### B) Trishna and Prabhuta Mutrata -

Trishna and Prabhuta Mutrata may be correlated with polydipsia and polyuria. In diabetes mellitus, high blood glucose increases urinary glucose excretion. This produces osmotic diuresis, leading to increased urination and loss of body water.

Persistent polyuria and polydipsia may result in: Dehydration, Electrolyte imbalance, Weakness, Postural dizziness, Worsening renal stress.

The diagnosis of diabetes mellitus should be confirmed with fasting plasma glucose, postprandial plasma glucose, HbA1c or other approved diagnostic tests. Current diagnostic criteria include HbA1c of 6.5% or higher, fasting plasma glucose of 126 mg/dL or higher, or a 2-hour oral glucose tolerance test value of 200 mg/dL or higher.

#### C) Daha and Diabetic Neuropathy -

Daha, or burning sensation, particularly in the hands and feet, may be clinically compared with diabetic peripheral neuropathy.

Other related symptoms may include: Tingling, Numbness, Pricking pain, Electric shock-like pain, Loss of protective sensation, Muscle weakness, Foot deformity.

Peripheral neuropathy increases the risk of injury because the patient may not notice a cut, blister or pressure point. An Ayurvedic clinical review has discussed burning, tingling and numbness in relation to diabetic neuropathic symptoms.



**D) Daurbalya and Chronic Metabolic Debility -**

Daurbalya means weakness or reduced strength. It may occur due to: Poor utilization of glucose, Dehydration, Weight loss, Recurrent infection, Malnutrition, Anaemia, Renal disease, Long-standing uncontrolled diabetes.

In Ayurveda, chronic Prameha may lead to Dhatu Kshaya and Ojas Kshaya. These concepts may be discussed in relation to chronic debility and reduced resistance to disease, but they should not be equated with a single modern laboratory parameter.

**E) Jwara and Infection -**

Fever in a patient with Prameha may indicate infection. Possible sources include: Urinary tract infection, Skin and soft-tissue infection, Diabetic foot infection, Pneumonia, Renal infection, Systemic infection or sepsis.

Hyperglycaemia may impair immune function and delay wound healing. Fever associated with an ulcer, abscess, urinary symptoms, confusion or severe weakness requires immediate evaluation.

**F) Atisara and Avipaka -**

Atisara and Avipaka may be correlated with gastrointestinal complications. Long-standing diabetes may affect autonomic nerves supplying the gastrointestinal tract and may produce: Nausea, Early satiety, Abdominal bloating, Constipation or diarrhoea, Delayed gastric emptying, Vomiting.

However, diarrhoea and indigestion may have many causes, including infection, medication effects and unrelated gastrointestinal disorders. They should not automatically be attributed to Prameha.

**G) Renal Complications -**

Ayurveda describes Mutravaha Srotas and Basti involvement in Prameha. This can provide a conceptual framework for discussing urinary and renal complications.

Modern diabetic kidney disease may present with: Increased urinary albumin, Hypertension, Rising serum creatinine, Reduced estimated glomerular filtration rate, Oedema in advanced disease.

A patient with Prameha should undergo renal assessment, including urine albumin and renal function testing when clinically indicated. Ayurvedic terms such as Mutra Dushti should not be used as a substitute for modern diagnosis of diabetic nephropathy.

**H) Ocular Complications -**

Long-standing diabetes may cause diabetic retinopathy due to retinal microvascular damage. It may be asymptomatic in the early stage.

Possible symptoms include: Blurred vision, Floaters, Difficulty seeing at night, Sudden visual disturbance, Loss of vision.

Visual symptoms in a patient with Prameha should be evaluated by an ophthalmologist. Eye screening is important even when the patient has no symptoms.

**I) Cardiovascular and Vascular Complications -**

Diabetes mellitus is associated with increased risk of: Coronary artery disease, Myocardial infarction, Stroke, Peripheral arterial disease, Hypertension, Poor circulation to the lower limbs.

The Ayurvedic concepts of Meda-dushti, Srotorodha and Dhamani involvement may be used for conceptual discussion. They should not replace blood pressure measurement, lipid profile, electrocardiography or vascular assessment.





**8) AYURVEDIC MANAGEMENT -****A) Nidana Parivarjana -**

The first step is avoidance of causative factors. Patients should reduce overeating, excessive sweet and oily food, prolonged sitting and day sleep. Lifestyle modification should be individualized according to age, Prakriti, body weight, occupation, Agni, disease stage and medication.

**Pathya Ahara –**

**यवप्रधानस्तु भवेत् प्रमेही यवस्य भक्ष्यान् विविधांश्च भक्षयेत्। (च.चि. ६)**

The diet should contain appropriate amounts of vegetables, pulses, fibre-rich foods and suitably selected cereals. Traditional texts particularly emphasize light food preparations and Yava.

Food containing Yava as a principal component and different preparations of Yava are described in the management of Prameha. Barley may provide dietary fibre and satiety, but its quantity should be included within the patient's total carbohydrate plan.

**Vihara**

Regular physical activity is an important component of Prameha management. Walking, yoga and other suitable exercises may improve physical fitness and support metabolic health. Exercise should be modified in patients with cardiovascular disease, neuropathy, retinopathy, foot ulcers or severe weakness.

**B) Shodhana -**

Shodhana may be considered in a strong and obese patient with significant Kapha or Pitta involvement. It should be performed only by a qualified Ayurvedic physician after assessment of Bala, Agni, Dosha and associated disease.

**C) Shamana Therapy -**

**संशोधनं नाहति यः प्रमेही तस्य क्रिया संशमनी प्रयोज्या।**

**मन्थाः कषाया यवचूर्णलेहाः प्रमेहशान्त्यै लघवश्च भक्ष्याः॥ (च.चि. ६/१८)**

Shamana medicines may be selected according to Dosha predominance, Dushya involvement, Agni, Disease stage, Patient strength, Renal and hepatic function, Concurrent medication, Risk of hypoglycaemia.

When a Prameha patient is unsuitable for purification, pacifying therapy should be used. Light food preparations, decoctions and barley-based preparations are described for alleviating Prameha.

**Selected Classical Herbs**

**दावीं सुराह्वां त्रिफलां समुस्तां कषायमुत्काथ्य पिबेत् प्रमेही।**

**क्षौद्रेण युक्तामथवा हरिद्रां पिबेद्रसेनामलकीफलानाम्॥ (च.चि. ६/२६)**

Ayurvedic literature describes several herbs and formulations in the context of Prameha management, including:

- Haridra — Curcuma longa.
- Amalaki — Emblica officinalis.
- Guduchi — Tinospora cordifolia.
- Musta — Cyperus rotundus.
- Daruharidra — Berberis aristata.
- Triphala — combination of Haritaki, Bibhitaki and Amalaki.



- Khadira — *Acacia catechu*.
- Lodhra — *Symplocos racemosa*.
- Chitraka — *Plumbago zeylanica*.
- Vidanga — *Embelia ribes*.

A decoction prepared from Darvi, Surahva, Triphala and Musta, or Haridra used with Amalaki juice, is described in the classical management of Prameha.

## DISCUSSION -

Charaka describes Prameha Upadrava as a group of complications involving thirst, diarrhoea, fever, burning sensation, weakness, loss of appetite, indigestion, suppurative lesions and abscesses. This description indicates that Prameha was understood as a chronic, progressive and systemic disorder.

The most clinically relevant correlations are:

- Trishna with polydipsia.
- Prabhuta Mutrata with polyuria.
- Daha with diabetic neuropathy or inflammatory symptoms.
- Daurbalya with chronic metabolic debility.
- Jwara with infection.
- Prameha Pidaka with diabetic carbuncle, infected ulcer and diabetic foot.
- Vidradhi with abscess.
- Mamsa Paka with tissue necrosis or severe infection.

These relationships should be described as possible clinical correlations.

Ayurvedic terms such as Dosha, Dushya, Kleda and Ojas belong to a distinct medical framework and cannot be directly equated with insulin, glucose, immunity or vascular pathology.

A responsible integrative approach combines Ayurvedic clinical assessment and lifestyle management with contemporary diagnosis, laboratory monitoring, wound care, ophthalmic screening, renal assessment and evidence-based treatment.

## II. CONCLUSION

Prameha is a systemic Ayurvedic disorder involving Dosha, Dushya, Agni, Kleda, Srotas and Ojas. Charaka Samhita describes its complications as Trishna, Atisara, Jwara, Daha, Daurbalya, Arochaka, Avipaka, Putimamsa Pidaka, Alaji and Vidradhi.

These complications may be correlated clinically with modern manifestations of diabetes mellitus, including dehydration, gastrointestinal dysfunction, infection, diabetic neuropathy, diabetic foot ulcer, carbuncle, abscess, tissue necrosis, renal disease and chronic debility. The correlation is useful for interdisciplinary understanding but should not be treated as an exact translation.

Prevention and management require Nidana Parivarjana, individualized Pathya-Apathya, exercise, weight management, appropriate Ayurvedic treatment, regular glucose monitoring and early evaluation of wounds, neurological symptoms, visual changes and renal abnormalities.

## REFERENCES

1. Agnivesha, Charaka, Dridhabala. Charaka Samhita, Nidana Sthana, Chapter 4: Prameha Nidana. Varanasi: Chaukhambha Orientalia.





2. Agnivesha, Charaka, Dridhabala. Charaka Samhita, Chikitsa Sthana, Chapter 6: Prameha Chikitsa. Varanasi: Chaukhambha Orientalia.
3. Sushruta. Sushruta Samhita, Nidana Sthana, Chapter 6: Prameha Nidana. Varanasi: Chaukhambha Sanskrit Sansthan.
4. Vagbhata. Ashtanga Hridaya, Nidana Sthana and Chikitsa Sthana, Prameha sections. Varanasi: Chaukhambha Orientalia.
5. Madhavakara. Madhava Nidana, Prameha Nidana. Varanasi: Chaukhambha Orientalia.
6. World Health Organization. Diabetes. Geneva: World Health Organization.emro.who+1
7. American Diabetes Association Professional Practice Committee. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2026. Diabetes Care. 2026;49(Suppl 1):S27–S49.diabetesjournals
8. An Ayurvedic Approach to the Diagnosis and Management of Prameha with Special Reference to Diabetic Neuropathy. AYU. 2019.journals.lww
9. Review of Prameha Upadrava and Diabetes Complications. World Journal of Pharmaceutical Research. 2024.wisdomlib
10. Review Article on Prameha Pidaka.storage.googleapis

