

A LITERALLY STUDY OF *PRAMEHA* (DIABETES MELLITUS) ACCORDING TO AYURVEDIC CLASSICS: A REVIEW

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ABSTRACTS

The conceptual theory of *Prameha Roga* and its complications shows the rich knowledge of the Ayurveda which is ancient. The whole Description of this disease are scattered in different classics of *Ayurveda* however *Brihatrayee* has unique inference. This paper reviews the well documented concept of the Ayurveda about the *Prameha Roga*. The trend of diabetes is growing gradually in the societies and is very difficult to prevent and manage its complexity. The Ayurvedic concept of the *prameha roga*, gives information on the subject like definition, *nidana*, general *samprapti*, *pathya* *apathya*, classification, characteristics, features etc. also approaches to treatment. This article highlights the wisdom of ancient Indian

literature and historical view of the disease i.e. *Prameha Roga* as well as its various complications including *madhumeha*. (Diabetes Mellitus)

KEYWORDS: *Prameha*, *Madhumeha*, *kaphaja prameha*, Diabetes Mellitus.

INTRODUCTION

Ayurveda is an ancient medical science which is based on scientific principles, described diabetes under the name of *Prameha* or *Madhumeha*. According to WHO diabetes mellitus is a metabolic disorder of multiple etiology which is characterised by chronic hyperglycemia with disturbance of carbohydrate, fat and protein metabolism resulting from defects of insulin secretion, insulin action or both.^[1]

Ayurveda has emphasized that lifestyle errors are the major etiological factor for *prameha*. The pathogenesis of *Prameha* seeks attention of physician because of involving the three

doshas with wide range of *Dushyas* i.e. ten *Dushyas*, ranging from *Rasa* to *Ojas*. It is a *tridoshajvyadhi* but *kapha Dosh* is predominant in the development of *Prameha*. Involvement of ten *dushyas* indicated that it is a systemic *vyadhi* involving the whole body. When these condition remain in body for a long time then it may converted into *madhumeha* vis a vis Diabetes mellitus.^[2]

MATERIAL AND METHODS

The *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, *Madhavidanam*, were scrutinized for relevant references regarding concept of *prameha/ Madhumeha* (diabetes mellitus). conceptual analysis was done for the proper understanding.

Nirukti (etymology)

In Ayurveda, nomenclature of every disease has been set on different basis viz sign and symptom, its root cause, its *Aashraya*, *Sthana* etc. *Prameha* got its name because of its *Pratyatma Lakshana*. *Prameha* – ‘*Pra*’ + ‘*Meha*’, *Madhumeha* – ‘*Madhu*’ + ‘*Meha*’

Definition

Prameha -

Acharya Vagbhatta describes *Prameha* as frequent and copious urine with turbidity; i.e. *Prabhuta & Avila mutrata*.^[3]

Madhumeha -

Madhumeha is a clinical entity in which patient passes large quantity of urine similar to *Madhu* having *kashaya* and *Madhura* taste, *Ruksha* texture and honey like colour & thus body attains sweetness. *Acharya Susrutha* narrated the term *Kshaudrameha*^[4] in place of *Madhumeha*.

Paryaya

Meha, *Mutradosha*, *Bahumutrata*, *Ojomeha*^[5], *Kshaudrameha*^[6]

Classification of *madhumeha/ prameha*

In Ayurveda the disease has been classified in four ways, according to.

1. Aetiology (causes)
2. Body constituent (*Prakriti*)
3. Predominance of *Doshas*
4. *Sadhyasadhyata* (Prognosis)

1. According to Aetiology

Sushruta has classified two types of *Prameha*.^[7]

1. *Sahaj Prameha* (by birth or by genetic defect)

Sahaj Prameha occurs due to *Bijadusti* (defect in genetic substance, either in mother or father). This clearly proves inheritance nature of the disease. Such type of patients is always thin. This type of *Madhumeha* may be compared with Juvenile diabetes, as described in modern medicine.

2. *Apathya Nimittaja Prameha* (Acquired)

Due to over eating habits, especially *Kaphajahara*, lack of physical exercise etc. this type of *Prameha* occurs. These patients are generally obese and can be compared with maturity onset type of diabetes.

A. According to Body constituents

1. *Sthula* or *Balwan rogi* and
2. *Durbala* or *Krishna rogi* of *Madhumeha* are classified.

This classification of the disease is important from the management point of view.^[8]

According to predominance of *Doshas*

3 groups –

1. *Kaphaja* (10 types),
2. *Pittaja* (6 types),
3. *Vataja* (4 types).^[9]

B. According to Prognosis

1. *Sadhya* – Subclassified into
 - I. *Sukhasadhya Pramehas*
 - II. *Kashtasadhya Pramehas*
2. *Asadhya* – Subclassified into
 - I. *Yapya Prameha*
 - II. *Pratyakheya Prameha*^[10]

Acharya Vagbhata, yogratnakara, bhavaprakasha, sharangdhara, madhavidana and *vangasen* has classified *Madhumeha* into 2 types.^[11]

- I. *Dhatukshayajanya Madhumeha* – *Vataprakoopa* takes place due to *dhatukshaya*.

II. *AvaranajanyaMadhumeha*– *vataprakopa* takes place due to obstruction in its channels by other *doshas*.

Nidanapanchaka

Knowledge of the disease acquired through *Nidana*, *Purvaroop*, *Roopa*, *Upashaya*, and *Samprapti*. These five parameters are called as *Nidanapanchaka*. The factors that cause disease by vitiating the *Dosha* and *Dushya* are denoted by the term *Nidana*. The aetiological factors given in Ayurvedic text can further be classified as *Samanya nidana* and *Vishista nidana*.

A. *Samanya Nidana* (General aetiology)

Depending upon factors there are two types

1. *Sahaj Prameha* and
2. *Apathya nimittaja prameha*.

1. *Sahaj prameha*

Charaka has clearly narrated that *Madhumeha* is a *Kulaja Vikara* which results due to the defect in the *Beeja*.^[12]

The commentator Chakrapani has explained the term '*KulajaVikara*' as that it is inherited from one generation to another i.e. from grandparents to father, mother and so on. *Charaka* narrated that *Sahaj* type of diseases can occur due to defect in *Beeja*, *Beejabhaga* or *Beejabhagavayava* which can be correlated to ovum and sperm to chromosomes and genes respectively.^[13]

2. *Apathya – NimittajaPrameha*

This *Samanyanidana* can again be classified into

- 1) *Aharasambanda* and
- 2) *vihara sambanda*

1. *Aharsambandhi*- *atidadhisevana*, *atidugdhasevana*, *gramyamansa*, *audakamansa*, *anoopamansa*, *navannpana*, *gud-atisevana*.^[14]
2. *Viharsambandhi*- *Avyayama*, *achinta*, *asyasukha*.^[14]
3. *Manas nidana*- *Bhaya*, *shoka*, *chinta*, *alasya*.^[14]

Prodromal Symptoms (*Pooravaroopa*)

In Ayurveda we can find the description of early symptoms of the disease. They are accumulation of dirt on the teeth (mouth, eyes, nose, and ears), a feeling of burning sensation in the palms, soles and whole body, stickiness of the skin all over the body, thirst and a sweet taste in the mouth etc., and *moothra madhuryam* (sweetness of urine).^[15]

Clinical Features (*Roopa*)

Acharya Sushruta narrated that the person should be diagnosed as *Pramehi* when complete or partial prodromal symptoms of *Prameha* accompanied by Polyuria get manifested.^[16] In this regard *Gayadasa* opined that in this disease all prodromal symptoms get converted into *Roopa* due to specific nature of the disease i.e. *Vyadhi Prabhava* from the above description we can say that, prodromal symptoms along with main symptoms get continue as the disease progresses.

The *Lakshanas* of *Prameha* can be understood under two categories,

1. *Mutra Sambandhi Lakshanas*
2. *Sarvadaihika Lakshanas*

1. *Mutra Sambandhi Lakshanas*

Mutra sambandhi Lakshanas of *Prameha* can be studied under two headings,

a. *Samanya Lakshanas* (*Pratyatma Lakshanas*)

One which is common to all twenty types of *Pramehas* –they are ‘*Prabhuta Mutrata*’ and ‘*Aavila Mutrata*’.^[17]

b. *Vishista Lakshanas*

As it is the *Dosha* which has major influence on pathology of this disease, it has been classified primarily on the basis of *Doshas* while their sub types are decided on the basis of the dominant *Guna* of that particular *Dosha*; even their *Lakshanas* are explained based on these *Gunas*.

Based on different combination of *Doshas* and *Dushyas* in various proportions, they produce different types of *Mutra Varna*, *Bheda* and *Lakshanas* in 20 types of *Pramehas*.

Hence *Vishista Lakshanas* pertaining to *Mutra* are specific to each type.

2. Sarvadaihika Lakshanas

Sarva daihika Lakshanas of *Prameha* can be studied under two main headings namely – ‘*Apathya Nimittaja*’ and ‘*Sahaja*’. The symptoms of these two explained by *Maharshi Sushruta* are basically the psychosomatic orientation of the patient. These can be used to decide the line of treatment of the *Pramehi*.

a. *Apathyanimittaja prameha lakshnas*

Sthaulya, Snigdhta, Bahavasheetva, ShayyaAsanaSwapna Sheelata.

b. *Sahaja prameha lakshanas-*

Krush, Ruksha, Alpa Ashee, Pipasa Bhrusha, Parisaranasheelata

Special characteristic features mentioned by *Acharya Susruta* in the context of *Madhumeha*.^[18]

Madhumehi prefers to stand still than walking, sitting than standing, lying down than sitting and sleeping than lying down.^[18] These features have been explained as “*Panchavidha Kriyashraya Linga*” by *Dalhana* in the context to above quotation.

Samprapti Ghatak (favorable things for disease)

- *Dosha - Tridosh (Vata, Pitta, Kapha), visheshatah Kapha.*^[19]
- *Dushya – Rasa, Rakta, Mansa, Meda, Majja, Shukra, Vasa, Oja, Lasika, Kleda*^[20] and *Sweda.*^[21]
- *Srotodushti - Sanga of Kapha leading to Vimargagamana and Atipravrutti of Kleda through the mootra.*
- *Agni - Vaishamya of all Agnis (or Dhatvagnimandya)*
- *Ama - Medogata Ama produced due to Jatharagnimandya and Dhatvagnimandya.*
- *Adhisthana – Basti*
- *Udbhavasthana – Amashaya*
- *Bhedavasta - Occurrence of Upadravas such as PutiMamsa and Prameha Pidika*
- *Nature – Asadhya*^[22], *anushangi.*^[23]

Samprapti

The sequential process of *Dosha* vitiation, their spread in the body to manifest the disease is called *Samprapti*.^[24] It includes various stages as disease progresses i.e. from *Nidana Sevana*, Vitiation of *Dosha Dushyas* and upto *Vyadhi Utpatti*.

Drava Roopi Kapha is in excess quantity (i.e. *Bahu Drava Sleshma*) and it is the mainly involved *Dosha* in the manifestation of disease *Prameha*.^[25]

Samanya Samprapti showing *Aparipakva Avastha* of *Dosha* involved in Manifestation of the disease *Prameha*.^[26]

The excessive indulgence in the etiological factors related to *Prameha* results into *Aparipakva Vata*, *Pitta*, *Kapha* and *Meda*, which further proceeds downward through the *Mutravaha Srotas* to get localized in *Basti Mukha* and thus leading to the manifestation of the disease *Prameha*. *Acharya Dalhana* interprets the term *Aparipakva* as *Ama* and even considers *Aparipakva Avasthas* of other *Vasadi Dushyas*.

Vishishta Samprapti

1. *Kaphaja Prameha Samprapti*^[27,28]

Due to indulgence in *Kaphakara Ahara Vihara* there is vitiation of *Kapha*. Due to similar *Guna* and affinity to *Meda*, it does *Meda Dushti* and *Kleda Dushti*, thereby increasing *Drava Dhatus* in the body. This vitiated *Shareera Kleda* along with *Dushta Kapha* and *Dushta Medas* enters into *Mutra Ashaya* and gets transformed into *Mutra*. During this Process, they acquire the *Dasha Gunas* of *Kapha* namely –

Shweta, *Sheeta*, *Snigdha*, *Guru*, *Madhura*, *Sandraprasada* and *Manda*. Based on these *Samyoga Vishesha* of *Dosha Gunas*, *Dasha Kaphaja Prameha* Manifests.

2. *Pittaja Prameha Samprapti*^[29,30]

Pitta Vriddhi in relation to other *Doshas* is associated with *Pittakara Ahara Vihara* and the subtle condition of *Dhatus* (or in presence of *Kaphaja Mehas*) causing *Pitta Dushti*, which leads to *Rakta Dushti* first due to *Ashrayeebhavata*. Later on other *Dhatus* get involved. Due to *Samyoga Visheshata* of the *Gunas* of *Pitta* (namely- *Kshara*, *Amla*, *Lavana*, *Visra* and *Ushna*) six varieties of *Pittaja Pramehas* are manifested. *Pittaja Pramehas* manifest at a quicker pace than *Kaphaja Mehas*.

3. *Vataja Prameha Samprapti*^[31,32]

In an individual whose body is affected with conditions of *Kaphaja* and *Pittaja Pramehas* and then also if he indulges in *Vatakara Ahara* and *Vihara*, then it aggravates the *Vata* very quickly which spreads all over the body and while doing so it drags down the *Vasa*, *Majja*, *Lasika* and *Ojas* to *Basti* and eliminates it from the *Shareera* thus leading to the manifestation of 4 varieties of *Vataja Pramehas*.

Upshaya Anupshaya

In case of *Prameha*, diet containing controlled carbohydrates, fats and proteins along with slight exercise like walking, jogging, some yogic procedures, relieve symptoms (*Upashaya*).^[33,34] While the diet containing excess fats (*Kaphakaraha*) leads to aggravation of symptoms and ultimately disease complications, it means this condition will be *Anupashaya* for the disease.^[35]

Prognosis

The prognosis of the disease can be established only after the consideration of *Sadhya-Asadyata*. *Prameha* has been described by *Charaka* as an '*Anushangi Vyadhi*'.^[36]

Charaka describes the prognosis in three categories.^[37,38]

- (i) *Sadhya* (Curable) - Patients who have diagnosed early in the onset, those who are *sthoola* (obese) and the origin of their disease is *apathyaja*.
- (ii) *Yapya* (Palliable) - *Pittaja prameha* and certain types of *kaphaja pramehas* are however helps control with treatment (palliative management).
- (iii) *Asadhya* (Incurable) - *Vataja* describes the incurable version of *prameha* and inherited diabetes, a *krisha* (lean) patient who is suffering with *Sahaja* variety.

Samanya Upadrava Of Prameha

Charaka highlighted some *Samanya upadrava* of *Prameha* such as – *Trishna*, *Atisara*, *Jwara*, *Daha*, *Daurbalya*, *Arochaka*, *Avipaka*, *Putimamsa-pidika*, *Alaji*, and *Vidradhi*.^[39]

Chikitsa

a) Based on type of *Prameha Rogi*^[40]

Sthoola and *balawana* – *Shodhana*

Krisha and *Paridurbala* – *Santarpana*

Even in *balavana* patient, after *Shodhana*, *santarpana* is advised depending upon the *Agnibala*. *Apatarpana* may produce *Gulma*, *Kshaya*, *Mehana-Shoola*, *Basti-Shoola* and

Mootragraha in *shodhita* persons.^[41] Patients not fit for *Shodhana* must be given with *Shamana Chikitsa*.

b) *Krishna Pramehi- Anna Pana*

Sthoola pramehi – *Apatarpana* based on *Yukti*.^[42]

Based on types of prameha

a) *Kaphaja Prameha*: *Shodhana* including *Vamana* and *Langhana*.^[43]

b) *Pittaja Prameha*: *Virechana*, *Santarpana* and *Samshamana*.^[44]

c) *Vataja Prameha*: *Acharya Sushruta* who first time give treatment for these *Asadhya Prameha* to convert them into *Yapya* one.

d) *Madhumeha*: *Teekshna Shodhana*.^[45]

Treatment Modalities

1. *Nidana Parivarjana*

2. *Shodhana Chikitsa*

3. *Shamana Chikitsa*

- *Apatarpana Chikitsa- Prameha* is an outcome of aggravated *Kleda* and *Kapha*, *Apatarpana* (depletion therapy) is the first line of treatment in *Kaphaja* and *Pittaja Prameha*.^[46]
- *Virukshana Chikitsa- Treatment* principles described for *virukshna* in *santarpanajanya Vyadhi* like in *Medoroga* can be applied in *madhumeha*.^[47]
- *Bahirparimarjana Shamana Chikitsa-Udwartana, Snana, Jalasechana, Vyayam* and *Lepa* of *sevyā, Twaka, Ela, Aguru chandana* should be used.^[48]
- *Shamanoushadha yogas* after *Shodhana*-
- After *samshodhana* following yoga is to be administered,
- *Amalaki rasa + Haridra + honey*
- *Triphala + visala + Devdaru + Musta*.^[49]
- *Sushruta* had described the treatment of *Madhumeha* in a separate chapter where in the roles of *Shilajatu, Tuvaraka*, and *Makshika* are explained fully. *Sushruta* has mentioned 20 single drug *Kashayas* for 20 *Pramehas*.^[50]

Rasayana Chikitsa

- *Prameha* is *Vatika* type and *Anusangi Vyadhi* with *Dhatukshaya*. *Acharya Sushruta* and *Vagbhata* mentioned *Rasayana* therapy for *Prameha*. *Shilajatu*, *Swarnamakshika* and *Tuvaraka* are *Rasayana* advised for *Madhumeha*.^[51]
- *Vamana* and *Virechana* are advised prior to administration of *Rasayana* therapy.
- *Acharya Sushruta* mentioned usage of *Salasaradi Gana Bhavita Shilajatu* along with the decoction of *Salsaradi Gana* after *Shodhana*. Patient who takes one *Tula* (100 Pala) *Shilajatu* will be cured from *Madhumeha*.^[52]

Pathya-Apathya

Pathya plays a significant role in controlling *Madhumeha*, while *Apathya* causes aggravation of the disease because *Prameha* is *Anushangi Vyadhi* i.e. once a *Pramehi* will always be a *Pramehi*.

Ahara sambadhi pathya in prameha^[53]

- *Shooka Dhanya*- *Jeerna Shali*, *Shashtika*, *Kodrava*, *Yava*, *Godhuma*, *Uddalaka*
- *Shimbi Dhanya* - *Chanaka*, *Adhaki*, *Kulattha*, *Mudga*
- *Shaka Varga* - With predominance of *Tikta Kashaya Rasa*- *Patola*, *Karavellaka*, *Shigru*
- *Phala Varga* - *Jambu*, *Dadima*, *Shringataka*, *Amalaki*, *Kapittha*,
- *Tinduka*, *Kharjura*, *Kalinga*, *Navina Mocha*
- *Mamsa Varga* - *Vishkira Mamsa*, *Pratuda*, *Jangala Mamsa*
- *Taila Varga* - *Danti*, *Nikumbha*, *Ingudi*, *Sarshapa*, *Atasi*

Vihara sambandhi pathya^[54]

- *Vyayama*
- *Krida* – Sports and other Strenuous exercise
- *Yojana Shatam Padagamana*: One should walk long distance up to 100 *yojana* (approximately 1 *yojana* = 6 miles) on foot without using footwear and umbrella
- *Jitendriya Vritti*
- *Apatarpaka Kriya*
- Patients of *Prameha* who are emaciated should be protected constantly without any physical work.

Apathya

All *Prameha karaka Nidana* are considered as *Apathya*. *Madhura*, *Snigdha* and *Guru Guna aahara sevana* and *Avyayama* are the main *Apathya*.^[55]

Acharaya Sushruta enlisted *Apathya Ahara- Sauviraka, Tushodaka, Shukta, Maireya, Sura, Asava, Jala, Panaka, Gramya Anooa Aoudaka Mamsa* are *Kapha Medo karaka*.^[56]

Prameha Mukta Lakshana^[57]

When the urine of *Prameha* Patient becomes

- *Apicchila* – Non slimy
- *Anaavila* – Non turbid
- *Vishada* – *Rooksha*
- *Tikta Katu* – Bitter or pungent

DISCUSSION

Diet is primarily responsible for growth and development of body, and a bad diet leads to a variety of illnesses. The proper diet, according to *Acharya Charaka*, rebuilds the shattered structures, nourishes the *Dhatus* (tissues), and maintains the equilibrium of the body's elements. On the other hand, a irrational diet, causes sickness. Limiting food has also been demonstrated to improve insulin sensitivity and beta cell activity (insulin-secreting pancreatic cells) in various studies. In diabetes, the role of *Ahara* and *Vihara* is very important, in not only controlling blood sugar levels but also preventing problems. In addition to herbal therapy, Ayurveda recommends dietary changes. such as avoiding sugary and simple carbohydrate - rich meals and increasing consumption of a variety of healthy grains. Also along with dietic changes Ayurveda recommends various exercises to diabetic patients. All category 2 treatment regimens are built around diet and exercise.^[58]

CONCLUSION

Diabetes is a slow killer with no curable treatment. In today's era people with diabetes have to face further complications like blindness, kidney failure and cardiac disorders. However proper medications, awareness and practicing daily exercise can reduce the severity of the disease. The goal of this article is to give general information about *prameha* explained in the ancient text.^[59]

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 21. Vagbhata, AshtangaHridaya (With Sarvangasundara commentary of Arundata and Ayurvedic Rasayana of Hemadri) Anna MoreshwaraKunthe, edited by Bhishakacharya Harishastri Paradkara Vaidya, Chaukhamba surabharatiprakashana, Varanasi, vaghbhatanidansthana 10/4.
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