

[https://doi.org/10.46344/JBINO.2022.v11i03\(b\).15](https://doi.org/10.46344/JBINO.2022.v11i03(b).15)

CONCEPTUAL VIEW OF DIABETES MELLITUS

¹Dr. Mansoor Ahmad & ²Dr Ashish Mishra

¹Associate professor, Department of Kriyasharira, Mahaveer Ayurvedic Medical College, Meerut, U.P.

²Associate professor, Department of Panchkarma, RB Ayurvedic Medical College and Hospital, Jalesar Road, Agra, U.P.

ABSTRACT

Diabetes is becoming an epidemic despite our profound understanding of the underlying molecular processes, cellular events, and interventional techniques to combat its development and consequences. People are turning to Ayurveda in the hopes of finding a full remedy to this disease. Ayurveda has a long history of treating diabetes patients and provides advantages over the contemporary biomedical approach. However, neither of these approaches appears to be capable of entirely resolving the diabetic problem. An integrated method using both systems appears to be preferable to employing one of these. However, adopting an integrated strategy necessitates a solid grasp of diabetes pathophysiology according to both systems. Diabetes is commonly associated with madhumeha, an Ayurvedic condition. We believe that this association is incorrect and is based on an incomplete knowledge of diabetes pathophysiology. Diabetes mellitus should be associated with sthauilya, kaphaja prameha, pittaja prameha, or vataja prameha (including madhumeha) depending on the pathophysiology and clinical symptoms in a specific patient, according to this article.

Key Words: Diabetes, Ayurveda, Sthauilya, Prameha, Madhumeha

Introduction

Diabetes mellitus has risen to national prominence in recent years as the world's leading silent killer. WHO predicts that India would have the fastest rising number of diabetic people. is a rapidly developing metabolic condition with numerous etiologies that is defined by persistent hyperglycemia with disruptions in carbohydrate, lipid, and protein metabolism as a result of the body's inability to generate enough insulin and/or properly utilize the insulin. Diabetic patients in India are expected to grow by 195% between 1995 and 2025. The difficulty with diabetes mellitus is that it is difficult to detect in its early stages. However, adhering to an Ayurvedic preventative plan from the start will easily avoid this condition or control it if currently suffering. It is a medical disorder characterized by a buildup of glucose in the person's urine and blood. This is known as hyperglycemia. Diabetes is formed from two words: diabetes (Greek) which means "siphon through" and mellitus (Latin) which means "sweetened with honey." Diabetes mellitus is a metabolic illness caused by a dysfunction of the pancreas, which produces the hormone insulin.

Despite profound understanding of underlying molecular mechanisms, cellular events, and phenomenal improvements in medical technology and medication discovery, biomedicine is still unable to treat diabetes. Diabetes is causing an increase in the economic burden, morbidity, and death. Ayurveda, an ancient Indian school of medicine that developed during the Vedic period

attempts to safeguard and maintain a healthy person's health while also curing the sick in a comprehensive manner. Ayurvedic medicine is well-known for its ability to treat multifactorial, interconnected complicated diseases. However, neither Biomedicine nor Ayurveda appear to be capable of totally resolving the diabetic condition. Both medical systems have their own merits, and an integrated strategy appears to be a superior way to address the diabetic problem. In order for it to be effective, we must first understand diabetes in terms of Ayurvedic ideas and illnesses with comparable genesis and presentation. Diabetes is not a new condition. It is a medical ailment that has existed since antiquity. There is a collection of clinical disorders defined by polyuria that are referred to as prameha in the works of Indian physicians. In their classic treatises Charaka Samhita, Sushruta Samhita, and Astanga Hridaya, Charaka, Sushruta, and Vagbhata successively characterized the condition prameha as a series of complicated urinary problems. Diabetes mellitus and prameha have a similar origin and clinical symptoms.

Diabetes mellitus, on the other hand, is now associated with madhumeha, which is the last stage of prameha. Madhumeha has grown so common that it is often used as a synonym for diabetes mellitus. We believe that this association is incorrect and is based on an incomplete knowledge of diabetes pathophysiology. It is critical to understand that madhumeha and diabetes mellitus are not synonymous. Correlations between

diabetes and madhumeha or prameha should be drawn based on a thorough examination of their etiology in both systems.

Diabetes in Ayurveda

Diabetes is a metabolic illness that is not always associated with a single Ayurvedic ailment. However, based on origin, pathophysiology, and clinical manifestations, it can be linked to a variety of diseases. The following conditions must be closely examined in order to identify connections and manage diabetes and its consequences.

1. Sthaulya's Prameha
2. Madhumeha
3. Prameha

Sthaulya is classified as one of the eight condemnable states (ashta-nindaniya) of the human body, but prameha is classified as one of the eight main illnesses (mahagada) by Indian physicians, demonstrating the disease's severity and complexity.

Prameha is recognized as sahaja (due to genetic causes) and apathyanimittaja (due to faulty diet and regimens). Both sthauilya and apathyanimittaja prameha share similar etiology and caused by excessive nourishment (santarpanjanya) and accumulation of excess fat in the body (medopradoshaja). Genetics (bija-swabhava) and psychological factors [e.g. gratified life (harshanityama) and lack of mental stress (achintana)] also play important role in causation of both sthauilya and prameha. Sthauilya in itself is a causative factor (nidanarthakararoga) of prameha. Kaphavardhakaahara-vihara (diet and lack of physical activities which results in energy surfeit) are main causative factors

for sthauilya and apathyanimittaja prameha.

Sthauilya is caused by overeating, medodhatwagni impairment, and an increase in meda dhatu (fat tissue). Impaired medodhatwagni (both in quantity and quality) shifts the metabolism in favor of meda dhatu buildup. It also causes a metabolic condition in which the remainder of the body's tissues, such as asthi, majja, and shukra dhatus, suffer. Sthauilya manifests as udara-parshwa-vridhhi and predisposes a person to prameha. Despite this proclivity, not every fat individual develops prameha. To evolve into prameha, other components such as bahvah abaddha meda (excess, aberrant, and unbound meda dhatu), bahu dravah shleshma (liquid quality of kapha), and sharir-shaithilya (looseness of body) are required. It is clear from the above discussion that multiple factors are involved in the pathogenesis of this condition.

The first is kapha, which grows in amount owing to numerous reasons and also liquefies (bahu dravah shleshma), followed by shaithilya or shithilikarana (looseness) of the body, laying the groundwork for the commencement of pathological processes, i.e. the body's vulnerability to disease. Following that, kapha interacts with excess (bahu) and unbound/unutilized (abaddha) meda, mamsa, and kleda, resulting in a variety of illness manifestations. Many sthauilya symptoms and prameha prodromal symptoms (poorvaroopa) are widespread, such as meda dhatuvridhhi, excessive thirst, hunger, terrible body odor, and so on.

Samprapti ghatakas

- Dosha (humur) – vata,pitta,kapha
- Dushya – meda,mamsa,kleda,rakta,vasa,majja,lasi ka,rasa and ojas
- Srotas (channel) – mootravaha
- Srotodusti – atipravrutti
- Agni – dhatvagni
- Udhbhavasthana – kostha
- Vyaktasthana – mootravaha srotas(urinary tract)

Clinical features

According to Ayurveda

- i. Malina danta -Tartar in teeth
 - ii. Hasta pada daha -Burning sensation of hands and feet
 - iii. Deha chikkanata -Excess glossy/ oily skin
 - iv. Trishna - Excessive thirst
 - v. Madhuryamasya - Feeling sweetness in mouth
 - vi. Prabhuta mutrata - Excessive urination
 - vii. Avila mutrata - Turbid urination
 - viii. Madhu samana varna - Urine having colour of honey
 - ix. Sweda - Excess perspiration
 - x. Anga gandha - Bad body odour
- According to Modern science

- i. Polyuria (Excessive Urine)
- ii. Polyphagia (Excessive Hunger)
- iii. Polydipsia (Excessive Thirst)
- iv. Exhaustion/Tiredness
- v. Body ache
- vi. Giddiness
- vii. Polyneuritis (Numbness / Tingling)
- viii. Visual disturbance

Prognosis

Charaka describes the prognosis in three categories

1. Sadhya - Curable: Patients who were detected early in the illness's outset, who are sthoola (obese), and whose condition originated in apathyaja.

2. Yapyya - Palliable: Pittaja prameha and some kinds of kaphaja prameha can be controlled with therapy (palliative management).

3. Asadhya - Incurable: Vataja depicts an incurable kind of prameha and hereditary diabetes, as well as a krisha (lean) patient suffering from Sahaja variety.

Treatment

According to Ayurveda the line of treatment of prameha is strictly on individual's constitution. It is based on an entire change in the lifestyle of the person, along with medication and diet, the patient is also advised to lead a healthy lifestyle and live an active life. Even mental aspects of the disease are stressed.

➤ In Sthulya (Obese) - The treatment must be mainly based on proper utilization of excess fat i.e. he should be give: a). Shodhana (purification process), b) Apatarpana - reduction in body weight by way of diet control or drugs, Vyayama (exercise) etc. Fasting, Diet control, Cleansing therapies (vamana, virechana, Basti), Physical exercise should be done.

➤ In all classics, ahara dravyas are described in detail and they cover all the food groups are :

1. Cereals
2. Pulses
3. Vegetables
4. Fruits

But according to Ayurveda one should start with light diet (laghu bhaksha, laghu ahara) and then gradually increase the quantity of food. It is a rule that one should keep complete attention on the condition of Agni i.e. digestion. Diabetes being a disease of deranged

metabolism, special attention should be kept on the condition of digestion and metabolism.

Exercise

However, Ayurveda recommends starting with a light diet (laghu bhaksha, laghu ahara) and gradually increasing the amount of food. It is a rule to pay close attention to the status of Agni, or digestion. Because diabetes is a metabolic disorder, additional care should be paid to digestion and metabolism.

- Vyayarma (exercises)
- Niyuddha (fighting)
- Kreedha (games) (4)

Drugs

Single formulations :

1. Guduchi swarasa (*Tinospora cardifolia*) – 10ml twice a day with honey
2. Amalaki Curna (*Phyllanthus emblica*) – 6 gm twice a day with honey
3. Karavellaka Phala Curna (*Momordia charantia*) – 3 gm twice a day with water

Compound preparations

1. T. Chandraprabha, 500 mg twice a day with water/milk.
 2. T. Vasant kusumakara Ras, 125 mg twice a day with Honey.
 - 3.T. Meghanada Rasa (Purified parada, gandhaka, oxides of kanta loha, teekshna loha and swarnamakshika, shilajatu, manashila, triphala and haridra. Prepared with bhringaraja juice), 125 mg twice a day with Ajadugdha/Godugdha
 4. Mauktika kamadugha, 125 mg twice a day with Ajadugdha/Godugdha
 - 5.Praval bhasma, 100 mg twice a day
 9. Mehmudgara (BR), 125 mg twice a day
- Medicated Ghee
1. Dhanvantara ghrita 5 to 10 gm/day
 2. Dadimadya ghrita 5 to 10 gm/day

Kwatha (decoction)

- 1.Darvi,Surahwa,Triphala,Musta
- 2.Triphala,darvi,Vishala,Musta.

Discussion

Diabetes is classified into two types: Type I (madhu meha) or insulin dependent (IDMM) and Type II (or non-insulin dependent) (NIDDM). Approximately 10% of those diagnosed with diabetes have type 1 diabetes mellitus. Both conventional and Ayurvedic medicine feel that this form of diabetes is incurable but treatable. The pathogenesis of Type I diabetes is thought to be a culmination of lymphatic penetration that results in the loss or disintegration of insulin secreting beta cells contained in the islets of Langerhans (pancreas). After a sufficient loss of these beta cells in the pancreas, blood glucose homeostasis is lost, and hyperglycemia results. The negative feedback loop inside the liver that monitors glucose levels detects excessive amounts of sugar and enlists the help of the urinary and endocrine systems. These systems aid the liver by attempting to eliminate harmful quantities of sugar in the bloodstream. As a result, the individual tends to pee more frequently and sweats more. Patients in this catabolic condition are typically diagnosed with diabetes, which necessitates the use of insulin to normalize glucose, reduce hyperglycemia, and control protein and fat digestion.

Often, persons living with diabetes will suffer with other auto-immune disorders such as vitiligo, hypothyroidism, graves disease, hashimoto thyroiditis, and Addisons disease. Both western medicine and Ayurveda believe that Type I diabetes must be treated with insulin

injections, dietary changes and implementation of an exercise regimen. The standard for western medicine treatment for individuals with Type 1 diabetes requires scheduled injections to help moderate their glucose levels. Each injection of insulin is determined by a sliding scale. This scale takes into account the person's age, diet, activity level and sensitivity to the insulin. Western medicine's unfortunate belief of 'one size fits all' dietary guideline does not take into account the quality food nor the person's size and dosha (mind-body type). This is the point where Ayurvedic treatment stands out from western medicine. From an Ayurvedic perspective, this form of diabetes is also incurable. However, Ayurveda sees the causation of the disease as a vata-vitiating lifestyle. This means that the individual has depleted their system from too little sleep, too much worry and stress with a possible genetic (karmic) connection. The symptoms are similar to western medicine but can also include complications due to candida, ulcerations, diabetic neuropathy (which can cause proprioception) difficulty, frequent nausea or vomiting and a fruity odor emanating from one's breath.

Conclusion

Diabetes is a disorder that has been linked to at least four Ayurvedic medical problems. Depending on the clinical symptoms, it might be associated with sthauilya, kaphaja prameha, or madhumeha. Diabetes should not always be treated in the manner of madhumeha, but an alternate diagnosis of one of the illnesses listed above should be investigated. Diabetes mellitus,

according to Ayurveda, is not a disease that can be cured with just medicine or a food plan. Though it is a yapyia (not completely curable / difficult to cure) condition, the aforesaid treatment technique will not only make the person free of Diabetes Mellitus, but will also protect the person to live a long (deergha jeevanam), healthy (sukhayu), and useful life.

Reference

1. Sushruta. Sushruta Samhita Chikitsasthana with Nibandha Samgraha commentary by Dalhana. edited by Yadavaji Trikamaji. Chaukhambha Orientalia, Varanasi, reprint 2009.
2. Agnivesha. Charaka Samhita Chikitsasthana revised by Charaka & Dridhabala with Ayurveda Deepika commentary by Chakrapanidatta. edited by Yadavaji Trikamaji. Chaukhambha Prakashan, Varanasi, reprint 2007.
3. Agnivesha. Charaka Samhita Nidanasthana revised by Charaka & Dridhabala with Ayurveda Deepika commentary by Chakrapanidatta. edited by Yadavaji Trikamaji. Chaukhambha Prakashan, Varanasi, reprint 2007.
4. Sushruta. Sushruta Samhita Nidanasthana with Nibandha Samgraha commentary by Dalhana. edited by Yadavaji Trikamaji. Chaukhambha Orientalia, Varanasi, reprint 2009.
5. Diabetes DOF. Diagnosis and classification of diabetes mellitus. Diabetes Care. 2009;32 (SUPPL. 1). doi:10.2337/dc09-S062.
6. Saini A. Physicians of ancient India. J Fam Med Prim Care. 2016; 5(2):254. doi:10.4103/2249-4863.192322.
7. Sushruta. Sushruta Samhita Sutrasthana with Nibandha Samgraha commentary

by Dalhana. edited by Yadavji Trikamaji. Chaukhambha Orientalia, Varanasi, reprint 2009.

8.Charaka Chikitsa sthanam; By Agnivesha; Translated into English by Dr. Ram Karan & Vaidya Bhagwan Das; Chaukamba Sanskrit Series, Varanasi & Krishnadas Academy; 2001.

9. Ashtanga Hridayam- Chikitsa sthanam ; Vagbhata, Translated into English by Dr.K.R. Srikantha Murthy ; Chaukamba Oriental Publisher & Distributor, Varanasi; Krishnadas Academy ; Section - 4; Chapter – 12 ; Page No.- 383-390 ; Chikitsa

10. Basavarajeeyam – 9th Chapter, Page – 433. 9. P.V. Sharma Dravyaguna Vijnana - Part -II; Chaukamba Vidya bhavan, Chowk, Banaras -1956.

11. Madhava Nidanam;Madhavakara, Translated into English by Dr. K. R. Srikantha Murthy; Chaukamba Oriental Publisher & Distributor, Varanasi; Krishnadas Academy; 1987 ; Chapter - 33 ; Page No.- 116, 119 ; Sloka - Referred -20-36 ; Roga Vinischayam.

12. Sarangadhara Samhita: By Sarangadhara, Translated into English by Dr. K. R. Srikantha Murthy; Chaukamba Oriental Publisher & Distributor, Varanasi. ; 1984; 1)Pradhama Kanda - Chapter-7. 2)Madhyama Kanda - Chapter - 2; Page No.- 12 ; 1)37 2)69,71,108, 171.; Dravya-Kwatha, Guggulu etc.

13. Ashtanga Hridayam- Nidanasthanam; Vagbhata, Translated into English by Dr. K. R. Srikantha Murthy; Chaukamba Oriental Publisher & Distributor, Varanasi; Krishnadas Academy; 1992; Vlo -II; Chapter – 10; Page No.- 92-99; Prameha - Sankya, Nidana, Rupas, Samanya Lakshanas, Upadravas etc.

14. Yogaratnakaram- Pramehaprakaranam, By Dr. Indeqdev Thripathi & Dr. Dayashanker Thripathi, Krishnadas Ayurveda Series 54, Chaukamba Krishnadas Academy, Varanasi – 1998; Chapter - Prameha Nidana; Page No. – 622 to 641.