

International Research Journal of Ayurveda & Yoga

Vol. 5 (5),152-155, May, 2022

ISSN: 2581-785X;<https://irjay.com/>

DOI: [10.47223/IRJAY.2022.5525](https://doi.org/10.47223/IRJAY.2022.5525)



Role of *Kleda Dushya* in *Prameha* (Diabetes Mellitus)-A Critical Review

Parveen Sharma,¹  Sumit,² Ajay Kumar Sahu,³ Harish Bakuni,⁴ Bharat Kumar Padhar,⁵ Sunita Rawat⁶

1,2-P.G Scholar, P.G Dept Of Kaya Chikitsa National Institute of Ayurveda, Deemed to be university, Jaipur

3,4-Associate Professor, P.G Dept Of Kaya Chikitsa National Institute of Ayurveda, Deemed to be university, Jaipur

5.-Assistant Professor, P.G Dept Of Kaya Chikitsa National Institute of Ayurveda, Deemed to be university, Jaipur

6-AMO, Govt. Ayurvedic Hospital Pratap Nagar, Jaipur. Rajasthan

Article Info

Article history:

Received on: 11-04-2022

Accepted on: 23-05-2022

Available online: 31-05-2022

Corresponding author-

Parveen Sharma, P.G Scholar, P.G Dept Of Kaya Chikitsa NIA Jaipur

Email: drparveensharma44@gmail.com

ABSTRACT:

According to the World Health Organization, diabetes mellitus will be the seventh largest cause of death by 2030. According to studies undertaken by the Indian Council of Medical Research, India currently has 62.4 million persons with diabetes. Diabetes patients experience several consequences throughout time. As a result, they are vulnerable to a wide range of infections. Modern medical research is attempting to solve the problem, but it has its own limitations. According to modern medicine, the treatment's goal is to achieve a protracted remission rather than a complete cure. According to Acharya Charaka, the vitiation of three Doshas creates 20 different varieties of *Prameha* as well as a slew of other ailments. *Nidan*, *Dosha*, and *Dushya* are three components that, when united in a strong state, cause *Prameha* to develop right away. The patient in *Madhumeha* passes a big amount of urine that looks like Madhu (honey) and tastes like *Kashaya* (astringent) and *Madhur* (sweet). In place of *Madhumeha*, Acharya Sushruta has told *Kshaudrameha*. An individual suffering from *prameha's* like is also increased by hereditary propensity. The unnecessary *Abaddha meda* (loose lipid), *Mamsa* (muscle proteins), *Kleda* (body fluids), *Shukra* (reproductive tissues), *Shonit* (blood), *vasa* (muscle fats), *Majja* (bone marrow), *Rasa* (body liquid with plasma), *Oja* (immunity and immune system of body) are significant components engaged with the pathogenesis of *prameha*. The present review highlights the role of *Kleda dushya* in the pathogenesis of Diabetes Mellitus.

Key words- Diabetes Mellitus, *Prameha.*, *Kleda*

INTRODUCTION

Diabetes mellitus is becoming the world's fastest spreading disease. India has been identified as having the fastest-growing Diabetic population. It is a metabolic condition in

which insulin synthesis is deficient or dysfunctional. Diabetes is defined by chronic hyperglycaemia along with a malfunction of carbohydrate, lipid, and protein metabolism, resulting in long-term damage to the heart,



This work is licensed under a CC BY 4.0 License

brain, veins, eyes, kidneys, and nerves.¹ Diabetes is becoming more and more common every day. Type-2 diabetes is the most common, accounting for over 90% of all diabetic cases. Diabetes affects 422 million people globally, the majority of whom live in low- and middle-income countries, and diabetes is responsible for 1.6 million fatalities each year. Both the number of cases and the frequency of diabetes have been progressively growing during the last several decades. According to WHO projections, 32 million individuals in India had diabetes in 2000, and by 2030, India will have over 80 million diabetic patients, accounting for 20 percent of the global diabetic population. Diabetes mellitus is one of the diseases that can be caused by a sedentary lifestyle, irregular eating habits, and stressful situations.² *Madhumeha's* clinical characteristics, etiopathogenesis, and prognosis are similar to diabetes mellitus in Ayurveda. Diabetes mellitus can cause long-term consequences such as diabetic retinopathy, nephropathy, and neuropathy. As a result, Type 2 diabetes prevention has been a serious concern in recent years. Insulin is produced by the beta cells of the islets of Langerhans in the pancreas gland. Insulin plays a critical role in our bodies' carbohydrate consumption.³ *Madhumeha* is made up of two words: *madhu* (sweetness) and *meh* (excessive urine). *Madhumeha*, *Ojo Meha*, and *Kshaudrameha* are some of the Ayurvedic synonyms. One of the twenty types of *Prameha* is *Madhumeha*. If these *Prameha* are not adequately treated, they may develop into *Madhumeha*, which is incurable. Instead of *Madhumeha*, Acharya Sushruta used the phrase *Kshaudrameha*.⁴ Lack of exercise and consumption of food that aggravates *Kapha*, *Meda* and *Mootra* are major causative factors of the disease. These are the inactive habits and increased eating of sweets and fats in daily diet.⁵ *Kaphaja prameha* can be triggered by etiological factors (especially *kapha*-predominant), *doshas*, and *dushyas*. Because of sluggish muscles and oily tissues, the troubled *kapha* spreads quickly throughout the body. The *kapha* mixes quickly with the *medas* (fat) - primarily because fats are frequently excessive in quantity, thick, and delicate in extreme body situations, but also because *kapha* and *medas* have indistinguishable features. Because *kapha* is vitiated, it also vitiates the *medas*. The vitiated *kapha* - *meda* then combines with *mamsa* (muscle tissues) and *kleda* (body liquid), despite the fact that these two should have just exceeded their respective amounts. The appearance of putrefied carbuncles (*pidika*) like *sharavika* and *kacchapika* in the muscle is aided by the vitiation of the muscle tissues. The body's fluid dhatus is also vitiated and

transformed into *mutra*. *Vrikka* (kidney) and *basti* (urinary bladder) are the two ends of the channels that transport urine; *meda* and *kleda* control the openings of these channels. The vitiated *kapha* prevents these channels from opening. This is a symptom of *prameha*, which can be continuing or hopeless due to a preference for all *kapha* features and concomitant vitiation of homogenous and heterogeneous dhatus. Different correlations of all *dushyas* in the development of *prameha bahuabaddha meda* (loose lipids), *mamsa* (muscle proteins), *kleda* (body fluids), *shukra* (reproductive tissues), *shonit* (blood), *vasa* (muscle fats), *majja* (bone marrow), *rasa* (body liquid with plasma), *rakta* (blood cells) *oja* (immunity and immune system of body).⁶

AIMS & OBJECTIVE

To establish the fact about role of *Kleda* in pathogenesis of *Diabetes Mellitus (Prameha)*.

MATERIAL & METHOD

Material related to *Kleda* and *Diabetes Mellitus (Prameha)* is collected from ayurvedic texts books, modern text books, index medical journals and website.

Kleda-Ayurveda Prospective

Kleda is a word that found in Ayurvedic books in relation to Dosh, Dhātu, Agni, Mala, and Guna of Dravya, among other things. It's important to recall the connection between *Kleda* and a person's *Prakrta Avastha* and a disease's *Vikrta Avastha*. *Prakrta Avastha* denotes *Swastha Avastha* (healthy circumstance), in which a person's *Dosha*, *Dhatu*, *Mala*, *Agni*, and soul, sense organs, and mind are in a joyful and balanced state. *Vikruti* is the study of changes that occur at the level of underlying illness variables.⁷ *Vikruti Vijnana* is concerned with the underlying factors that are necessary for understanding and diagnosing sickness. *Kleda* is characterised in the classics as a manifestation of *Jala Mahabhoota* in the body, with *Jala* as the dominating element and its *Drava*, *Snigdha*, and *Mridu* qualities producing softening and loosening of solid materials. So, *Kleda* is nothing more than *Udaka* with a few tweaks. When normal liquid portions (*Ardrata*) grow in *Dhatus* as a result of metabolism or in some pathological circumstances, it is mostly removed by *Mootra*. *Sweda* also aids in elimination, however *Mootra* is the major performer because its purpose is *Kledavahan*.⁸ *Kleda* is closer to *Kapha* than the other *Tridoshas*. However, *Pitta* must also be involved in the formation of *Kleda*. *Swedana*,

Kledasruti, and other functions of Pitta are supposed to exist and Pitta by *Asrayaashryi Bhava* relates to *Rakta*.^{9,10} So, excess *Drava Bhava* of the body is conveyed through *Rakta* in the form of *Kleda*. This demonstrates that *Kleda* formation is possible in all *Dhatus*. This *Vikruta Kleda* will produce *Prameha* when it hits the *Meda* and reaches the *Basti*. In addition to *Prabhoota Aavila Mootrata* outcomes (discoloration and excess production of urine).¹¹ Diabetes mellitus, Arthrosclerosis, Autoimmune disease, Hypertension, and D.M. complications such as Carbuncles are examples of non-inflammatory disorders. ESR will never rise here. As a result, it's linked to an increase in C-RP levels.¹² *Mootravaha Srotas* with *Prameha* problems have abnormal cystatin-C (a biomarker of renal function) and micro albumin (>30 300mg/dL) levels.¹³ The natural activities of the kidneys are disturbed by *Vikruta Kleda*, which impedes the *Prakruta Karma* of *Mootra vikriti* in *Kledavahana*. As a result, there are pathological differences in the quality and amount of urine.

***Kleda dushya* in the *Samprapti* (Pathogenesis) of *Prameha* (Diabetes mellitus)**

Kleda is a bodily component that is essentially linked to pathogenesis. *Kleda's* physiology is substantially linked to *mutra* and *sweda*, as well as *meda*. As a result, when *kleda* is added, it has a direct impact on the above components. *Mutra* and *sweda* maintain *kleda's* homeostasis in normal physiology. *Sweda*, in particular, keeps it in the body, and *mutra* is evacuated from it according to the body's condition and need. When *kleda* becomes vitiated, it affects the physiology of *mutra and sweda* and disrupts the accumulation of genuine components, resulting in *shaithilya*. *Prabhootha mootrata* (polyuria), *sweda vrddhi* (expanding perspiring), *shaithilya* (shortcoming), *Daurgandhya* (awful smell), and *Avilamutrata* are the manifestations of *kleda* vitiation (turbid urine). Glycosuria causes osmolar centralization of the urine and osmotic diuresis, resulting in water and salt loss, as well as potassium prompts, in diabetic patients. The increased level of catecholamines in DM promotes excessive sweating, which leads to electrolyte loss through the skin, such as salt and chlorides. Water and electrolyte imbalances can be linked to the entire miracle depicted under *kleda*.¹⁴

DISCUSSION

Ten *dushyas* are involved in the pathophysiology of *Prameha*: *bahuabaddha meda*, *mamsa*, *kleda*, *shukra*,

shonit, *vasa*, *majja*, *rasa*, *rakta*, and *oja*. These ten *dushyas*, are correlated to loose lipid, muscle proteins, body fluids, reproductive tissues, blood cells, muscle fats, bone marrow, body liquid with plasma, immunity, and immune system.¹⁵ *Kleda*, also known as *kledaka kapha*, is an important bhava in the human body. This is one of the 6 *Ahar Parinamkar Bhavas* identified by Charak acharya. According to '*Prakledane Sandra*' *kleda* consists of *Sandra gunsa*. Any change in quality transforms it into *dushya* or *mala*, like in *Prameha*, *Kushtha*, and so on.¹⁶ According to *Vaidyaraj Datarshashtri*, the *drava guna* of *kapha*, which is nothing but *kleda*, is the root of *Prameha*.¹⁶ In other words, '*Bahudravasleshma*' is a condition that generates *agnimandya* and disrupts *tej mahabhuta* in *Dhatwagni*. *Dhatushaithilya* in *prameha* is caused by this. *Kleda* is an important concept in the appropriate diagnosis of *Prameha*.

Increased *kleda* levels in the body result in increased urine volume and frequency. Because *Kleda* is *drava* in nature, it affects all of the body's *drava* or *kapha pradhan dhatus*.¹⁷

CONCLUSION

Kleda is an important principle of Ayurved. According to the criteria mentioned, *Kleda* plays a significant function in the body's normal physiological processes. This *Kleda* is linked to *Dosha*, *Dhatu*, *Mala*, *Agni*, and other aspects. This *Prakruta Kleda* helps in the normal functioning of *Dosha*, *Dhatu*, *Mala*, *Agni*, and other body systems, as well as maintaining normal physiological processes. When it switches to *Vikruta Avastha*, it causes *Prameha* (diabetes mellitus) by interfering with the proper functioning of *Dosha*, *Dhatu*, *Mala*, and so on. So, we can come to the final conclusion that *Kleda* is used in Ayurveda as a normal constituent needed for the functions of body, helping in digestion, existing in all *Dhatus*, softening them in normal amount. When the *Vikruta* of *Kleda* crosses a certain threshold, the functions of *Dosha*, *Dhatu*, *Agni*, *Annapachan*, and *Mala kriya* are hampered. It causes *Prameha*, *Prameha-pidika*, to manifest. As a result, we can say that *Kleda* plays crucial role in *Prameha*.

Acknowledgements:- Nil

Conflict of Interest – None

Source of Finance & Support - Nil

ORCID

Parveen Sharma , <https://orcid.org/0000-0001-7150-6592>

REFERENCE

1. American Diabetes Association (2009). Diagnosis and classification of diabetes mellitus. *Diabetes care*, 32 Suppl 1(Suppl 1), S62–S67. <https://doi.org/10.2337/dc09-S062>
2. <https://www.who.int/news-room/fact-sheets/detail/diabetes>
3. [https://www.nhp.gov.in/Madhumeha-\(Diabetes-mellitus\)_mtl](https://www.nhp.gov.in/Madhumeha-(Diabetes-mellitus)_mtl)
4. Murthy, A. R., & Singh, R. H. (1989). Concept of prameha/madhumeha (contradictions and compromises). *Ancient science of life*, 9(2), 71–79.
5. <http://www.emro.who.int/nutrition/reduce-fat-salt-and-sugar-intake/index.html>
6. Prajapati C. Understanding of Madhumeha and Its Ten Dushyas in Light of Contemporary Knowledge. *International Ayurvedic Medical Journal*. {online} 2022 {cited March 2022} Available from: http://www.iamj.in/posts/images/upload/674_679.pdf
7. Ranade S, A Text Book of Sharira-Kriya Vijnan (Part-1), Published by Chaukhambha Sanskrit Pratishthan- Delhi, 2009. Page -92
8. Pandeya DM, Shreemad Vagbhat Virachit Astang Hraday, Published by Saraswati Pustak BhandarAmdavad, 2006-2007, Sutra Sthan Adhyay – 11, Slok No. 5, Page - 205.
9. Pandeya DM, Shreemad Vagbhat Virachit Astang Hraday, Published by Saraswati Pustak BhandarAmdavad, 2006-2007, Sutra Sthan Adhyay – 11, Slok No. 26, Page -20
10. Tripathi B, Charak Samhita of Agnivesa elaborated by Caraka and redacted by Drdhabala (volume 1), Nidan Sthan, Adhyay- 04, Slok-09 published by Chaukhambha Surbhartee Prakashan- Varansi, printed-2013, Page No.- 615.
11. Tripathi B, Charak Samhita of Agnivesa elaborated by Caraka and redacted by Drdhabala (volume 1), Nidan Sthan, Adhyay- 04, Slok-09 published by Chaukhambha Surbhartee Prakashan- Varansi, printed-2013, S SPAGE No.- 615
12. http://en.m.wikipedia.org/wiki/Cystatin_C on date 07/05/2021
13. <https://www.mayoclinic.org/tests-procedures/microalbumin/about/pac-20384640> on date 07/05/2021
14. Patley S, Concept Of Etiopathogenesis Of Madhumeha And Its Management. *European Journal Of Pharmaceutical And Medical Research*. 2020, Vol. 7(3). Issn 2394-3211.201-205. 14.
15. http://www.journalijar.com/uploads/117_IJAR-27059.pdf
16. <https://www.easyayurveda.com/2018/12/21/kledaka-kapha/>
17. <https://ayurvedamysore.org/ayurvedic-understanding-of-diabetes-mellitus/>

How to cite this article: Sharma P, Sahu AK, Bakuni H, Padhar BK, Rawat S “Role Of *Kleda Dushya* In *Prameha* (Diabetes Mellitus)-A Critical Review” IRJAY.[online]2022;5(5);152-155. Available from: <https://irjay.com> DOI link- <https://doi.org/10.47223/IRJAY.2022.5525>