



Review Article

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ETIOLOGICAL FACTORS OF PRAMEHA (PREDIABETES) AND MADHUMEHA (DIABETES): AN AYURVEDIC REVIEW

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ABSTRACT

Diabetes mellitus refers to a group of common metabolic disorders that share the phenotype of hyperglycemia. Due to the burden of type 2 diabetes and its complications, much attention has been given to prevention, beginning with identifying at-risk individuals prior to diagnosis. Prediabetes is one of the major clinically entity, striking resemblance with that of Prameha in Ayurveda and Diabetes Mellitus having close resemblance with Madhumeha as described in Ayurveda. Prameha is of 20 types based on the type of urination and on the basis of Dosha predominance it is categorized namely as Kaphaja, Pittaja and Vataja Prameha. Prameha Nidana are of 2 types - Sahaja (hereditary) and Apathya Nimitaja (acquired). Apathya Nimitaja (Acquired) is further of three types- Kaphakara, Pittakara and Vatakara. Etiological factors of Prameha can also be categorized into Samanya Nidana (General factors) and Vishesh Nidana (Specific factors). If different clinical stages of Prameha (Prediabetes) are not managed in due time it may lead to Madhumeha(diabetes). Nidana Parivarjana plays a first step in the fight against any disease. The study of Nidana (etiological factors) reveals the rich knowledge of the Ayurveda in the prevention of Diabetes by following Nidana Parivarjana.

Key Words: Diabetes, Prameha, Ayurveda, etiological factors.

INTRODUCTION

Diabetes mellitus refers to a group of common metabolic disorders that share the phenotype of hyperglycemia¹. The effects of diabetes mellitus include long-term damage, dysfunction and failure of various organs. Due to the burden of type 2 diabetes and its complications, much attention has been given to prevention, beginning with identifying at-risk individuals prior to diagnosis. Prediabetes is a potentially reversible stage of the development of type 2 diabetes². Prediabetes is the state in which some but not all of the diagnostic criteria for diabetes are met. Prediabetes is one of the major clinically entity, striking resemblance with that of Prameha in Ayurveda and Diabetes Mellitus having close resemblance with Madhumeha as described in Ayurveda. Lifestyle and dietary errors are the major etiological categories described for Prameha and Madhumeha, which closely resemble with the etiology of diabetes. If different clinical stages of Prameha (Prediabetes) are not managed in due time it may lead to Madhumeha(diabetes)³. Madhumeha is also one variety of Vatika Prameha and is listed in Mahagada due to its severity and chronicity. Ayurveda considers holistic approach in management of Prameha by Nidana Parivarjana, Shodhana, Shamana and Pathya Aahar Vihar. The world is looking towards safe and effective prevention of diabetes. Therefore, it is essential to recognize the potential of Ayurveda and Nidana Parivarjana plays a first step in the fight against diabetes. The study of Nidana (etiological factors) reveals the rich knowledge of the Ayurveda in the prevention of Diabetes by following Nidana Parivarjana. The review was done with the aim to study the different aspects of Nidana in Prameha and the utility of Nidana Parivarjana.

REVIEW OF PRAMEHA

Prameha is of 20 types based on the type of urination and on the basis of Dosha predominance it is categorized namely as Kaphaja, Pittaja and Vataja Prameha⁴. Different Gunas of Doshas combined with Dushyas to produce a specific type of Prameha⁵.

Classification of Prameha According to Dosha: According to Acharya Charaka⁶ 10 Kahajameha are- Udakameha, Ikshuvalikameha, Sandrameha, Sandraprasadameha, Suklameha, Sitameha, Sikatameha, Sanairmeha, Alalameha, Sukrameha. Susruta has mentioned Pistameha, Surameha, Lavanameha and Phenameha while Sandraprasadameha, Suklameha, Sitameha and Alalameha described by Charaka are not mentioned⁷. Acharya Vagbhatta mostly described as Charaka but Ikshumeha, Lalameha are included in place of Ikshuvalikameha and Lalameha respectively⁸.

According to Acharya Charak Pittaja Meha⁹ are- Ksharameha, Kalameha, Nilameha, Lohitameha, Manjishthameha, Haridrameha. According to Acharya Susruta Amlameha, and Sonitameha are replaced by Kalameha and Lohitameha¹⁰. According to Acharya Vagbhatta Raktameha name is used in place of Lohitameha¹¹. According to Acharya Charaka Vataja Meha are – Vasameha, Majjameha, Hastimeha, Madhumeha¹². According to Acharya Susruta Sarpimeha and Ksaudrameha¹³ used in place of Majjameha and Madhumeha. Vagbhatta named as Acharya Charak.¹⁴

Classification of Prameha According to Etiological Factors: Acharya Charaka has classified all the patients of Prameha into two main groups viz. Sthula Prameha and Krisa Pramehi. Susruta also mentioned that body constitution of Sahaja Pramehi

is generally Krisa (thin) and that of Apathya Nimitaja Pramehi is Sthula (obese).¹⁵ On the basis of Nidana- Apathya Nimitaja and Sahaja¹⁶ variety of Prameha are described in classics. Apathya Nimitaja subtype can be further classified into Santarpanajanya (over nutrition) and Apatarpanajanya (under nutrition) as narrated by Charaka while describing the treatment of Prameha. Acharya Charaka also narrated that Jata Pramehi is incurable because it is a Kulaja Vikara and Bijadosajanya. Defect in Beeja i.e. sperm /ovum or defect in Bijavayava – i.e. Chromosome.

Nidana (Etiology)

All the ancient texts have mentioned the common etiological factors of Prameha but Charaka mainly narrated the specific etiological factors according to Dosha and also mentioned the specific etiological factors of Madhumeha. Prameha Nidana is of 2 types¹⁷ - Sahaja (Hereditary) and Apathya Nimitaja (Acquired). Apathya Nimitaja (Acquired) is further of three types- 1. Kaphakara 2. Pittakara 3. Vatakara

Kaphakara: Mainly causes vitiation of Kapha (Bahudrava), Meda (Bahu & Abaddha), Mamsa (Saithilya) Kleda, Lasika Rasa, Sukra Ambu.

Pittakara: Vitiates mainly Pitta, Sonita Mamsa, Increases Mutra and Sweda quantity.

Vatakara: Mainly vitiates Vata, Causes severe depletion of Vasa, Majja and Oja.

Etiological factors of Prameha can also be categorized into two types as (A)Samanya Nidana (General factors) and (B) Vishesha Nidana (Specific factors).

Samanya Nidana (General factors): Samanya Nidana of Prameha are the Hetus which cause Kapha, Medas and Mutra Vriddhi. Aaharaja Nidana includes excessive use of new peas, black gram & other pulses prepared in Ghrita, Guda and Ikshu preparations, milk, fish, wine & curd preparations, meat soup of different Aanupa animals etc. All Aaharaja Nidana are Kapha and Medo Verdhaka. Vihara are Excessive sleep, lack of exercise, worry, grief and anxiety all causative factors of Prameha.

Table 1: Samanya Aharajanya Nidana of Prameha, stated by various Acharya in Samhita

Aharajanya Nidana	Ch. ¹⁸	Su. ¹⁹	A.H ²⁰	M.N ²¹
Atidadhisevana (excessive use of curd)	+	-	+	+
Gramyamamsaatisevana (excessive meat-soup of domestic animals)	+	-	-	+
Audakamamsaatisevana (excessive meat-soup of aquatic animals)	+	-	-	+
Aanupamamsaatisevana (excessive meat-soup of marshy animals)	+	-	+	+
Payansi-Sevana (excessive use of milk)	+	-	+	-
Navannasevana (new cereals)	+	+	+	-
Navannapanasevana (new drinks)	+	+	-	-
Guda Vikara Atisevana (products of Jaggery)	+	-	+	+
Kaphavardhaka Ahara Sevana (Kapha promoting regimens)	+	-	+	+
Sheeta-Dravya Sevana (cold foods)	-	+	+	-
Madhura-Dravya Sevana (sweet foods)	-	+	+	-
Dravannapana (excessive liquids and fatty foods)	-	+	+	-
Medavardhaka Dravya (excessive fatty diets)	-	+	+	-
Mutravardhaka Dravya (materials that increase urine)	-	-	+	-
Amla Lavanarasa Sevana (excessive sour & salty food consumption)	+	-	+	-
Tikta-Kashayarasa Sevana (bitter& astringent food consumption)	+	-	-	-
Ushna-Katu Rasa Sevana (hot spicy food consumption)	+	-	-	-
Ikshu Vikara Sevana (excessive sweat things)	+	-	+	-
Snigdha Dravya Sevana (oily food consumption)	-	+	+	-
Guru Ahara Sevana (heavy food consumption)	-	-	+	-
Picchila Ahara	-	-	+	-

Table 2: Samanya Viharajanya Nidana of Prameha, stated by various Acharya in Samhita

Viharajanya Nidana	Ch. ¹⁸	Su. ¹⁹	A.H ²⁰	M.N ²¹
Asya-sukham (idle sitting)	+	-	+	+
Swapna-sukham (Excessive sleep)	+	-	-	+
Kaphavardhaka Vihara Sevana (Kapha promoting regimens)	+	-	+	+
Avyayam (abstains from physical exercise)	-	+	-	-
Achinta (lack of tensions)	+	-	-	-
Krodha (anger)	+	-	-	-
Ratri Jagaran Awaking during night)	+	-	-	-
Shoka (sorrow)	+	-	-	-
Alasya (lassitude)	-	+	-	-
Diwaswapna (sleep at day time)	-	+	-	-

Vishesha Nidana (Specific etiological factors)

Following are the Specific Nidana of Prameha according to Doshiika predominance

1. Kaphaja Prameha Nidana²²: Aharjanya Nidana are Hayanka, Yavaka, Chanaka, Kuddalaka, Naishadhya, Itkata, Mukundaka, Mahavrihi, Promodka, Navanna, Sarpishmatam, Navaharenu, Gramya Mamsa, Aanupa Mamsa, Audaka Mamsa,

Shaka, Tila, Palala, Pisthanna, Payasa, Krishara, Vilepi, Ikshu-Vikara, Meda-Mutra Vardhaka Ahara, Mandaka Dadhi, Madhura, Nava Dravya. Viharajanya Nidana are Mrijjavarjana, Vyayamavarjana, Swapna, Shayya Aasana, Prasanga, Shleshma-Meda- Mutravardhaka.

2. Pittaja Prameha Nidana²³: Aharjanya Nidana are Uhsna, Amla, Lavana, Kashaya, Katu, Vishama Ahara. Viharajanya Nidana are Aatapa, Agni, Santapa, Shrama, Krodha.

3. Vataja Prameha Nidana²⁴: Aharjanya Nidana are Kashaya, Katu, Tikta, Ruksha, Laghu and Sheeta. Viharajanya Nidana are Vyavaya, Vyayama, Vishama Shari

Specific Etiology of Madhumeha²⁵

Nidana are Guru, Snigdha, Amla, Lavana, Navaanapana, excessive Indulgence of Nidra, Asyasukha, not taking Vyayama, Chinta and Samsodhana. Causes of Diabetes Mellitus are Insulin Resistance, Pancreatic beta-cell failure, Genetic predisposition, Environmental factors, metabolic disturbances and abnormalities of insulin secretion and action²⁶. Sushruta in Ajiranadhikara and Charaka in Trividhakushiya Vimana Adyaya mentioned that in disturbed state of psyche (Manasa), one is not able to digest the food even if taken in normal quantity, which leads to formation of Ama. Ama produced by the vitiated mental factors may be leading to Prameha. Medoroga or Sthaulya has been recognized as an abnormal feature of the body by all the classics of Indian medicine. If we examine the etiology of Medoroga, it is almost the same as described for Prameha.

DISCUSSION

Abhishyandi nature of curd causes obstruction in Rasavaha Srotas causing Kaphaja disorders, Guru nature of Dadhi (curd) takes longer time for its digestion producing Apakwa Rasa Dhatu, which again produces Avarodha in Rasavaha Srotas. Gramya and Anupa Mamsa Rasa is Guru, Drava and Abhyashindi in nature which causes Agnimandya after intake. Agnimandya vitiate Kapha and Meda which are the main ingredients forming pathogenesis of Prameha. Milk and milk products are Madhura, Snigdha, Guru and Sita in nature and are Kaphakara. These increase Kapha, Meda and Mansa increasing the risk of Prameha. Navannam (newly harvested cereals) are Abhishyandi and take longer duration for digestion causing Ama- Rasa Dhatu and Kleda. These two cause Avarodha in Srotas causing excessive formation of Kleda. Navapanam (new liquor) is Guru and causes Sroto obstruction and vitiates Tridosha. Gudavikruti are Kaphakara and increase Medadhatu. Excessive consumption of Madhura, Sthira, Guru, Snigdha Rasa causes obstruction of Medovaha Srotas by Apakwa Ahara Rasa and also makes Vikrit Medodhatu. Ashayasukham (Inactivity, idle sitting), Svapnasukham (excessive amount of sleep, sleep even at day time) avoidance of physical exercise, Snanaveshi (avoidance of cleaning), avoidance of Sodhana Karma, and all regimens which increases Kapha, Meda and Mutra are the etiological factors of Prameha. Excessive sleeping even at daytime vitiates Kapha Dosha and Medodhatu. The etiological factors that are responsible for the particular type of Prameha should be avoided to prevent that type of Prameha.

CONCLUSION

Nidana Parivarjana plays a first step in the fight against diabetes. The study of Nidana (etiological factors) reveals the rich knowledge of the Ayurveda in the prevention of Diabetes by following Nidana Parivarjana.

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