



DIABETES MELLITUS (MADHUMEHA) A LIFESTYLE DISORDER IN AYURVEDA

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Article Received on 11/06/2020

Article Revised on 01/07/2020

Article Accepted on 22/07/2020

ABSTRACT

According to Ayurveda, body is divided into three biological energies, which broadly controls your bodily functions. "Vata Dosha is responsible for all the micro and macro movements in the body, Pitta Dosha is responsible for digestion and metabolism and Kapha Dosha is for strength and growth. Diabetes is caused by the imbalance of Kapha and Vata Doshas." Diabetes mellitus is becoming fastest considerable diseases in the world. India has being estimated with fastest growing population of Diabetics. It is a metabolic disorder may result in deficiency or dysfunction of the insulin production. The preventive measures in Ayurveda can prevent the disease. The main causative factor is said to be sedentary lifestyle and food habits. In Ayurveda it is described in Vataja Pramehas, which can be manage conservatively with exercise, diet and internal medication.

KEYWORDS: Diabetes Mellitus, Ayurveda, Lifestyle, Madhumeha.

INTRODUCTION

Since a long time, Ayurveda has been emphasizing more on the importance of diet and lifestyle in the maintenance of health, according to which a healthy man is referred as "he who indulges daily in healthy diet and lifestyle activities, who discriminates between wholesome and unwholesome and acts accordingly, who is not attached too much to the worldly affairs, who develops the habit of charity, considering all as equal, is truthful, pardoning, and keeping company of good persons becomes free from diseases."

All polyuric diseases in Ayurveda are described under 'Prameha', and Madhumeha is one amongst them, equated to Type 2 Diabetes Mellitus. Diabetes mellitus is a metabolic disorder of multiple etiology, characterized by chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion, insulin action, or both. Ayurvedic remedies for Madhumeha (Diabetes mellitus) are the oldest among all the available therapies, which includes in the Prameha category. Prameha are a list of urinary disorders, especially characterized by profuse urination with several abnormal qualities due to imbalance of Doshas. In Madhumeha the urine becomes (sweet and smells) like honey. It is of two distinct types,

one due to the aggravation of Vata on account of the Dhatukshya and the other due to Kapha - Meda Avarana (Blockage of channel along with Vata Prakopa. When there is condition of Avarana (blockage of the channels/activity) there are the additional symptoms of the vitiation of the particular Dosha without any other apparent cause. Sometimes the symptoms are mild and suddenly they appear in severe form which is difficult to cure. Diabetes Mellitus is the most threatening endemic lifestyle disorder, having social, medical and economic ramifications globally. As per a recent report of the International Diabetes Federation, each year 3.8 million deaths are attributable to diabetes and related complications; at least 50% of diabetics are unaware of their condition (indicating lack of awareness); and up to 80% of type 2 diabetes is preventable by adopting a healthy diet and increasing physical activity. Studies have proved that active participation of the patients in the form of lifestyle changes can result in less expense for the management of diabetes and ensure good glycemic control also.

ETIOLOGY

Enjoying sedentary habits and the pleasure of sleep excessively, too much use of yoghurt and its preparation, meat juice of domestic, aquatic and swampy animals,

milk and its preparation, newly harvested cereals, new/fresh wines, preparations of jaggery (cane sugar preparations) and all other Kapha - aggravating factors are the causes of the diabetes syndrome.

PATHOGENESIS (SAMPRAPTI)

Samprapti of Madhumeha is best described by Acharya Vagbhatta. He said Madhumeha can originate in two ways.

1. By the aggravation of Vata caused by Dhatukshaya.
2. By the obstruction of Vata caused by Doshas covering it. Madhumeha which is caused by Dhatukshaya manifests as thin and asthenic individual due to loss of Oja. All this is Ojakshaya meaning an imbalance in Ojas. In Margavaranjanya Madhumeha the vitiated Kapha and Meda obstruct the passage of Vata. The obstructed Vata is vitiated again and carries Ojas to Basti thus manifests Madhumeha.

As per Ayurveda according to the potency of particular feature of etiology, Dosha (innate pathogenic factors) and Dushyas (substratum of pathology), response occurs in the form of non-manifestation or otherwise of the disorders. When these three factors do not combine together or if combined after a long time or in weakened state, disorder will not be there, or it will manifest lately, or in a mild form or without all the said symptoms. On the contrary, the result will be contrary. Thus is said the cause of response in the form of non - manifestation or otherwise of all disorders.

SAMPRAPTHIGHATAKAS: (FAVORABLE THINGS FOR DISEASE)

- Dosha (humor) – Vata, Pitta, Kapha
- Dushya – Meda, Mamsa, Kleda, Rakta, Vasa, Majja, Lasika, Rasa and Ojas
- Srotas (channel) – Mootravaha
- Srotodusti – Atipravrutti
- Agni – Dhatvagni
- Udbhavasthana – Kosta
- Vyaktasthana – Mootravaha Srotas(urinary tract)

PATHOGENESIS: (The manner of development of disease)

The beta cells of the islets of Langerhans in pancreatic gland are responsible for the secretion of the hormone insulin. Among other things, insulin is extremely essential for the proper utilization of the carbohydrates in our body. If insulin is absent due to a metabolic disorder, or if it is not performing its functions properly, then these carbohydrates accumulate in the bloodstream in the form of glucose. The glucose then collects in the urine, which is in fact one of the primary characteristics diabetes mellitus is identified with. Hence, this can be said to be either a deficiency in the production of insulin by the pancreas, or a dysfunction of the insulin produced by the pancreas.

MAIN CAUSES

Sleeping in day time, lack of exercise, Laziness, Sedentary habits, consumes food and drinks which are cold, unctuous, sweet and fatty items etc, (Fat rich Diet).

CLASSIFICATION

➤ Prameha is classified aetiologically in to Sahaja (Hereditary) and Apathya nimittaja (Unwholesome things – food and exercise etc). Sahaja means due to Matapitabheejadoshakruit (Chromosomal defect from parents).

➤ According to physical management:

- i. Apatharpana Uthaja Prameha describing the lean diabetic
- ii. Santharpana Uthaja Prameha relating the obese diabetic

➤ According to the Doshic causes, these Pramehas are classified as twenty types :

- i. Vataja Pramehas – There are totally four Vataja Pramehas.
- ii. Pittaja Pramehas – There are totally six Pittaja Pramehas.
- iii. Kaphaja Pramehas – There are totally ten Kaphaja Pramehas.

Out of these, diabetes mellitus is termed as Madhumeha. It is one of the four Vataja Pramehas.

PREMONITORY SYMPTOMS

In Ayurveda we can find the described 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 and soles, stickiness of the skin all over the body, thirst and a sweet taste in the mouth etc., and Mootra Madhuryam (sweetness of urine).

CLINICAL SYMPTOMS

Prabhootha Mutrata (Poly uria), Avila mutrata (Turbid Urine) and Medo Dushti Lakshanas are the main symptoms of Prameha.

SPECIFIC AYURVEDIC SYMPTOMS (PARAMETERS)

1. Malina Danta - Tartar in teeth
2. Hasta Pada Daha - Burning sensation of hands and feet
3. Deha Chikkanata - Excess glossy/ oily skin
4. Trishna - Excessive thirst
5. Madhuryamasya - Feeling sweetness in mouth
6. Prabhuta Mutrata - Excessive urination
7. Avila Mutrata - Turbid urination
8. Madhu Samana Varna - Urine having colour of honey
9. Sweda - Excess perspiration
10. Anga Gandha - Bad body odour
11. Shithilangata - Flaccidity of muscles
12. Shayana Asana Swapna Sukha - Desire for sedentary life

13. Shitapriyatwa - Desire for cold food & environment
14. Gala Talu Shosha - Dryness of palate & throat

The classic symptoms of untreated diabetes are loss of weight, polyuria, polydipsia and polyphagia.

MAIN SYMPTOMS (MODERN SCIENCE)

1. Polyuria (Excessive Urine)
2. Polyphagia (Excessive Hunger)
3. Polydipsia (Excessive Thirst)
4. Exhaustion/Tiredness
5. Body ache
6. Giddiness
7. Polyneuritis (Numbness / Tingling)
8. Visual disturbance.

PROGNOSIS

Charaka describes the prognosis in three categories

- a. **Sadhya** – Curable: Patients who have diagnosed early in the onset, those who are Sthoola (obese) and the origin of their disease in Apathyaja.
- b. **Yapya** – Palliable: Pittaja Prameha and certain types of Kaphaja Pramehas are however helps control with treatment (palliative management).
- c. **Asadhya** – Incurable: Vataja describes the incurable version of Prameha and inherited diabetes, a Krisha (lean) patient who is suffering with Sahaja variety.

LIFESTYLE RELATED ETIOLOGIES OF DIABETES IN AYURVEDA

Asayasukha (habituation to sitting on soft cushions for long periods) and Swapanasukha/Atinidra (prolonged sleeping) are suggested as key predisposing factors for diabetes. Divasvapna (day sleeping) is also one of the causes of Prameha. Charaka has also emphasized that anxiety, anger, worry, grief, and similar other stress producing factors lead to the development of Prameha in susceptible individuals. Madyapana (alcohol consumption) has a significant role in the etiology of Madhumeha. Vyavayi, Vikasi etc. ten Guna (properties) of Madya (alcohol) are opposite to Ojas, causes Tridoshadushti (vitiation) and Kshubdhata (altered state) in Ojas which in turn can hamper Vyadhikshamatava (immunity); it may be one of the predisposing factors of Madhumeha.

AYURVEDIC DIET AND LIFESTYLE PROTOCOLS FOR DIABETES

1. First and foremost guideline is to avoid the diet and lifestyle related etiological factors involved in Type 2 diabetes (Nidanaparivarjana).
2. Sthula Madhumehi person diet should be Apararpanaguna and heavy for digestion, while Krisha Madhumehi person diet should be Santarpanaguna and light for digestion. Krisha patients diet should be such that it doesn't increase Meda.
3. Octafactor guidelines for proper use of diet like Prakriti, Karan, Sanyoga, Rashi, Desha, Kala, and the user, must be taken into consideration.

4. According to Ritu (seasons), various diets and activities should be prescribed depending upon the nature of Prakriti and Doshas.

PATHYA AHARA FOR DIABETICS IN AYURVEDA

Ayurveda has given utmost emphasis for the maintenance of Pathya Ahara. Ayurveda stated that if one take wholesome diet and activities suitable to all Dhatus (tissues), he can never suffer from Madhumeha. It is said that, like bird reaches its nest on the tree, in the same way Prameha reaches the person who eats more, unhygienic (even by not taking bath) and lazy. Quantity and quality of diet should be decided on the basis of Agnibala (digestive power).

The indigenous diet may not be useful in lowering the blood sugar to the same extent as insulin and other hypoglycemic agents. However, by acting as Ayurvedic nutraceuticals, it supplements and improves the quality of life; therefore, may be useful as adjunct to manage the disease and its complications. Ayurvedic dietary plans comprise a wide range of multivalent actions as health promoting dietary additives as well as putative therapeutic agents, which is of considerable importance to diabetic health.

PATHYA VIHARA FOR DIABETICS IN AYURVEDA

For preventing Prameha, Sushruta has recommended walking of 100 yojan in 100 days i.e. 1 yojan per day (1 yojan is ~ 7.5 km). A quotation 'Nihasukhatva Sukhaya cha' in Kaphasya Upakrama mentioned by Vagbhata is very appropriate for preventing type 2 diabetes, which means withdrawing of luxury to create happiness. Sthula Pramehi are advised to do exercises like wrestling, horse riding, vigorous walking etc but Krisha Pramehi are advised to protect their strength and not to do exercises.

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. The principles of treatment in a diabetic patient may be classified as under.

There are two types of diabetics.

1. Sthulya (Obese) 2. Krusha (Asthenic).

1. In Sthulya (Obese – Sthula Pramehi)

The treatment must be mainly based on proper utilization of excess fat i.e. he should be give: a). Shodhana (purification process),

b) Apararpana - reduction in body weight by way of diet control or drugs, Vyayama (exercise) etc.

- Fasting
- Diet control

- Cleansing therapies – Vamana – (induction of emesis)
- Virecana (induction of purgation) Basti (applicatin of medicine through the anal route – in specific conditions)
- Physical exercise

2. In Krusha (For Lean patient – Krisha Pramehi)

Asthenic type the treatment should be mainly based on the line of increasing stamina and vitality by way of tonics (Brumhana) diet, drugs etc., and the patient should never be given excessive Langhana or Apatarpana i.e. he should not be starved.

Note: The patient, whether obese or Asthenic, suffers from the complications like Gulma (tumours), Kshaya (Tuberculosis), pain in abdomen etc., he should always be given some food. A diabetic and an obese person generally suffer from excessive appetite and thirst and so some type of nutrition should always be given.

CONCLUSION

Disorderly lifestyle plays an important role in the development of type 2 diabetes. Along with drug interventions, emphasis must be given to socioeconomic, behavioral and nutritional issues and to promote a healthier lifestyle (in order to increase compliance to the lifestyle modifications) especially for high risk individuals. Dietary and lifestyle plans should be made in accordance with the day-to-day requirement of an individual. Due importance must be given to adopt Yoga in daily routine. Maintaining physical wellbeing, mental tranquility and sanctity is equally crucial.

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