

CAUSATIVE FACTORS OF DIABETES MELLITUS ACCORDING TO AYURVED**Dr. Ankita Vashist***

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INTRODUCTION

Diabetes mellitus is the world's largest silent killer. India has been projected by WHO as the country with the fastest growing population of Diabetic patients. It is estimated that between 1995 to 2025 diabetic patients in India will increase by 195%. The problem with diabetes mellitus is that it is very difficult to diagnose in the early stages.

However, a person stick to an Ayurvedic preventive strategy right from the beginning can easily prevent this disease. It is a medical condition in which there is an accumulation of glucose in the urine and blood of the person. Diabetes mellitus is a metabolic disorder i.e. it is caused due to the malfunctioning of the pancreas, which is responsible for the production of the hormone insulin.

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. 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

Madhumeha (Prameha)

Ayurvedic remedies for Madhumeha (diabetes mellitus) are the oldest among all the available therapies, which includes in the Prameha category. Prameha are characterized by profuse urination with several abnormal qualities due to doshic imbalances. The main causes of Prameha are lack of exercise and improper food habits in excess food intake which falls in the category of ushna, Snigdha and guru are the primal cause of this disease - Fish, curd are good example.

Foods that increase kapha, medhas and moothra are the etiological factors for prameha. The word Prameha is derived from, Pra – means excess, Meha – ksharane - passing of urine. So Prameha is passing excessive urine and turbid in color ('prabhoothaavilamootrata').

Main Causes

Sleeping in day time, lack of exercise, Laziness,

Sedentary habits, consumes food and drinks which are cold, unctuousness, sweet and fatty items etc.

Classification

Prameha is classified aetiologically in to Sahaja (Hereditary) and Apathyanimittaja (Unwholesome things – food and exercise etc)

Sahaja means due to Matapitabheejadoshakruit (Chromosomal defect from parents).

II. According to physical management

- i. Apatharpanauthaja prameha describing the lean diabetic
- ii. Santharpanauthaja prameha relating the obese diabetic

III. According to the doshic causes, these pramehas are classified as twenty types:

- a. Vatajapramehas – There are totally four vatajapramehas.
- b. Pittajapramehas – There are totally six pittajapramehas.
- c. Kaphajapramehas – There are totally ten kaphajapramehas. Out of these, diabetes mellitus is termed as madhumeha. It is one of the four Vatajapramehas.

Samprapthighatakas

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

Samprapthi (Pathogenesis)

Kapha undergoing increase by the etiological factors, reaches various dooshyas like rasa (plasma), rakta (blood) etc. As there is a shaithilyata (looseness) in the body and it being fluid predominant, spreads all over the body and gets vitiated, while spreading it gets mixed with medas (fat – adipose tissue), mamsa (muscle) and kleda (body fluids). Body fluids which got vitiated draw them to the urinary bladder and produces prameha, similarly the Pitta affects them, and Vata also brings about vitiation in them and produce prameha.

Premonitory Symptoms

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 moothra madhuryam (sweetness of urine).

Clinical Symptoms

Prabhoothamutrata (Poly uria), Avilamutrata (Turbid Urine) and Medodushti lakshanas are the main symptoms of prameha.

1. Malinadanta
2. Hasta padadaha (Burning sensation of hands and feet)
3. Dehachikkanata (Excess glossy/ oily skin)
4. Trishna (Excessive thirst)
5. Madhuryamasya Feeling sweetness in mouth
6. Prabhutamutrata Excessive urination
7. Avila mutrata Turbid urination
8. Madhusamanavarna Urine having colour of honey
9. Sweda Excess perspiration
10. Angagandha Bad body odour
11. Shithilangata Flaccidity of muscles
12. Shayana asana Swapnasukha Desire for sedentary life
13. Shitapriyatwa Desire for cold food & environment
14. Gala talushosha Dryness of palate & throat

Main Symptoms

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-

1. Sadhya – Curable: Patients who have diagnosed early in the onset, those who are sthoola (obese) and the origin of their disease in apathyaja.
2. Yapyya – Palliable :Pittaja prameha and certain types of kaphajaprimehas are however helps control with treatment (palliative management).
3. Asadhya – Incurable: Vataja describes the incurable version of prameha and inherited diabetes, a krisha (lean) patient who is suffering with 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.

There are two types of diabetics:

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

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 – (induction of emesis) virecana (induction of purgation) basti (applicatin of medicine through the anal route – in specific conditions)
- Physical exercise

1. In krusha (For Lean patient)

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.

A diabetic and an obese person generally suffer from excessive appetite and thirst and so some type of nutrition should always be given -

DIET

The following food which can be given to the diabetes: - The role of ahara and vihara are equally or even more important in diabetes to control blood sugar level as well as to prevent complications of this disease.

1. Cereals

Yava (Hordeum vulgare - Barley) are the best, different preparations of food, prepared from Barley can be given e.g. Mantha, Odana, Appopa, bread, Roti etc.

Wheat (Godooma) can also be given. Rice: - Ayurveda prescribed old rice (puranashali), as one of the cereals, which can be prescribed to the diabetic patients.

2. Pulses

Mudga (VignaradiataGreengram), Chanaka (Cicer arietinum Linn. – Bengal gram), Kulattha (Dolichosbiflorus), Adhaki (Cajanuscajan - Pigeon pea) etc, can be taken.

3. Vegetables

All types of bitter vegetables (Tiktashaka) e.g. Karela (Momordicacharantia - Bitter gourd), Methi (Trigonellafoenum-graecum - Fenugreek), Patola (Vietnamese luffa, Vietnamese gourd, or Chinese okra), Rasona (Allium sativum Linn. – Garlic), Udumbara (Ficusracemosa - Cluster Fig Tree, Indian Fig Tree or Goolar (Gular) Fig), etc. should be given.

4. Fruits

Jambu (Syzygiumcuini - Black berry), Amalaki (Phyllanthusemblica - Nepalese/Indian gooseberry, or Dhatrik (in Maithili) or amla), Kapitta (Limoniaacidissima - Wood Apple, Elephant Apple, Monkey Fruit or Curd Fruit), Tala phala (Borassusflabellifer- the Asian Palmyra palm, Toddy palm, Sugar palm, or Cambodian palm), Kharjura (Phoenix sylvestris -Date Sugar Palm), Kamala (Nelumbonucifera Indian lotus, sacred lotus, bean of India, or simply lotus,), Utpala (NymphoeaStellata) etc., can be allowed to take.

5. Seeds

Kamala, Utpala seeds can be allowed to take. 6. Flesh: Harinamamsa (Deer flesh), Shashakamamsa (Rabbit), birds like Kapotha, Titira etc., can be taken.

6. Liquor

Old sura (old wine) may be given. 8. Oils: Mustard oil (Sarshapataila) is best. Ingudi (Balanitis aegyptiaca) Ghritha may be used in pithaja prameha. But according to Ayurveda one should start with light diet (laghubhaksha, laghuahara) 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 Brindha et al metabolism, special attention should be kept on the condition of digestion and metabolism.

Exercise

Hard exercises are prescribed for diabetics and obese persons. This is meant for proper utilization of the fat and consumes the glucose in the body. The methods can be changed in the present times according to the habitat (desha) and time (kala). But the exercises are very necessary. Some of the hard, productive exercises prescribed by Shushruta are as under:-

1. Vyayarma (exercises) (2) Niyuddha (fighting) - (3) Kreedha (games) (4) Gajacharya, turagacharya, rathacharya, padacharya to ride an elephant, horse, cart riding and walking etc.
2. Yoga improves all sorts of metabolism in the body. So diabetics should perform different types of yoga. Yoga will definitely help diabetes mellitus.

Drugs

As regards drugs, there are so many drugs and formularies but the main drugs are either bitter (Tikta) or astringent (kashaya) in taste. They improve the fat and carbohydrate metabolism. Some of the medicines are given below;

The drug of choice is -

- (1) Shilajatu
- (2) Guggulu and
- (3) Haritaki (myrobalan) (4)Amalaki.

Single formulations

1. Guduchiswarasa (Tinosporacardifolia) – 10ml twice

a day with honey (A.H.Ci 12/6)

2. Amalaki Curna (Phyllanthusemblica) – 6 gm twice a day with honey (A.H.Ut. 40/48)
3. KaravellakaPhalaCurna (Momordiacharantia) – 3 gm twice a day with water (D. V. P. V. Sharma. Voll.II. page – 685)

Compound preparations

1. T. Chandraprabha, 500 mg twice a day with water/milk (S.S.Ma.K.)
2. T. Vasant kusumakaraRas, 125 mg twice a day with Honey (R. S. Rasayana VajikaranaAdhikara)
3. Brihatvangeswara Rasa, 125 mg twice a day with Ajadugdha/Godugdha (B. R. Prameha cikitsa)
4. NisamalakiVati, 500 mg trice a day with TriphalaKasaya (A. H. Prameha Cikitsa)

Medicated Ghee

1. Dhanvantaraghrita 5 to 10 gm/day - (Bhavapraksh page 496)
2. Dadimadyaghrita 5 to 10 gm/day - (Bhavapraksh page 494)

Avaleha

1. Saraleha: (Bhavaprakash):
Prepare decoction of asana (Pterocarpus marsupium), khadira, babbula and bakula (Mimusopselengi). During boiling add oxides of tamra and loha and powders of amalaki, danti, lodhra and priyangu. This is useful for all types of Prameha. Dose: 3to 5 mg / day.

2. Gokshuradyavaleha (Bhavaprakash):
Prepare decoction of gokshura and add trikatu, nagakeshara, cinnamon, ela, jatipatra and vamshalochana. This is also useful in all types of Pramehas. Dose: 3to 5 mg / day.

Kwatha (decoction)

1. Darvi, Surahwa, Triphala, Musta.
2. Triphala, darvi, Vishala, Musta. Composition of the above two decoctions are same except for one drug. The first contains Surahwa (Devadaru) and the second contains Vishala. Vishala is drastic purgative and so can be used in constipated persons. The dose and duration of therapy, pathya– apathy (wholesome and unwholesome) may be conveniently decided by the physician on case to case basis on Ayurvedic parameters.

CONCLUSION

Ayurveda does not regard diabetes mellitus as a disease that can be treated by mere medicine or by a dietary regimen. Though it is a yapyia (not totally curable / difficult to cure) disease, the prolonged use of the above treatment procedure will not only generate the person free from Diabetes Mellitus but protect to live a long life (deerghajeevanam), healthy (sukhayu) and will be useful to the society (hitayu).

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