

Ayurvedic Management of Diabetes Mellitus

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॥ *Ano bhadraa: krathavo yanthu viswatha:* ॥

“Let noble thoughts come from all sides.”

Abstract

Ayurvedic System of Medicine clearly defines this disease and its line of treatment.

Diabetes Mellitus is known to Indians from *Vedic* period onwards by the name *Asrava* (*Prameha*). They were treating this problem very effectively at that also. Diabetes is also known as Madhumeha in Ayurveda.

According to Ayurveda, prameha is divided in 4 major types (and total 21 types)

1. Kapha type (again divided into 10 types)
2. Pitta type (again divided into 6 types)
3. Vata type (divided into 4 types)
4. Juvenile diabetes for children (for unhealthy practices of parents and/or due to the sins of past-birth)

This study evaluates the efficacy of Classical and Traditional Ayurvedic **line of treatment** in above different Diabetes types.

Ayurvedic Management of Diabetes Mellitus

Introduction

Madhu meha which has been correlated with Diabetes Mellitus has become a global problem in spite of advances in modern science. India has been projected by WHO as the country with the fastest growing population of Diabetic patients. It is estimated that between 1995 – 2025 diabetic patients in India will increase by 195%.

Diabetes Mellitus is also a *maharoga* (major disease) because it affects most part of the body and every cell of the human physiology. The ancient Indian physicians described not only the sweetness of urine as one of the major symptoms but also the relationship of the disease with disturbance of the 5 sheaths of the body – *annamaya kosha*{Food sheath}, *pranamaya kosha*{Energy sheath}, *manomaya kosha*{Mind Sheath}, *vijnana maya kosha*{Intellectual Sheath} and *anandamaya kosha*{Bliss Sheath}.

All classical texts describes prameha. The word prameha derived from the root *mih sechane* meaning watering that means dilution of everything in the body not only urine).

Aetiology

The main causes of *prameha* (diabetes) 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 examples. Foods that increase *kapha*, *medhas* and *moothra* are the etiological factors for prameha.

Yashcha kinchith vidhiranyepi sleshma medho moothra

samjananam sa sarva: nidana vishesha:

Physical Classifications

For the management of this disease – prameha (diabetes) can be listed in two categories:

- 1) *Apatharpana uthaja prameha* describing the lean diabetic and
- 2) *Santharpana uthaja prameha* relating the obese diabetic.

Aetiological classification of diabetic patients

- 1) *Sahaja prameha* (congenital)
- 2) *Apathyanimitaja prameha* (due to over eating and poor habits)

The similar classification can be found in *Bhela Samhitha*

- 1) *Prakruthi Prabhaavam*
- 2) *Narasya Swakrutham*

Dosha classification

Though *prameha* is a *tridoshaja vyadhi*, the relative predominance of any one *dosha* and *dooshya* enables its classification in to *Vathaja, Pithaja and Kaphaja* pramehas.

These have further been classified in to twenty sub categories in all the three classics of Ayurveda. *Kaphaja and Pittaja prameha* have been sub classified in to ten types and six types respectively. These sixteen types have the physical characteristics of urine that is colour, density and volume depending up on the different gunas of *Kapha* and *Pitta*. *Vataja prameha* has been sub classified in to four types depending up on *dhathu* being excreted through urine.

The above 20 types are classified on the basis of colour and physical characteristics of urine. The above 20 types of *prameha* are the different types of *prameha* can also be correlated with a systemic urological and nephrological conditions. The above theory is well described by all *acharyas* by general prodromal symptoms for all types of *pramehas* in which sweetness of urine is the common and important symptom. In our practice we could be classify *prameha* according to *dosha* predominance. They are

- 1) *kaphaja*,
- 2) *pithaja*,
- 3) *vathaja*,
- 4) *kapha-pithaja*,
- 5) *kapha-vathaja*,
- 6) *pitha-vathaja*, and
- 7) *vatha-pitha-kaphaja*.

In these types *sannipatha*, *kevala vathaja* and some stages of *kapha-vthaja* and *pitha-vathaja* can be considered as IDDM. And others are considered as NIDDM.

Poorva Roopa

Prodromal Symptoms of *prameha* have been explained in detail by all the *acharyas* especially in *Brihathrayies*

They are as follows

- | | |
|--|---|
| 1. <i>Sweda</i> | Profuced sweating |
| 2. <i>Angagandham</i> | Foul smell of the body |
| 3. <i>Anga shidhilathwam</i> | Looseness the body |
| 4. <i>Sayyasna swapnasukhabhishangithwam</i> | Feeling of lethargy |
| 5. <i>Hridayopadeham</i> | Feeling of some thing coated
or heaviness of Hridaya |
| 6. <i>Netropadeham</i> | Feeling of some thing coated |

	on eyes
7. Jhwopadeham	sensation of a coated tongue
8. Shravanopadeham	Feeling of coating on ears
9. Anga ghanathwam	Heaviness of body parts
10. Keshathivridhi	Excessive growth of hairs
11. Nakhathivridhi	Excessive growth of Nails
12. Sheetha priyathwam	Affinity towards cold
13. Gala shosham	Dryness of throat
14. Thalu shosham	Dryness of palate
15. Asya madhuryam	Sweet taste in mouth
16. Karadaham	Burning sensation of palms
17. Pada daham	Burning sensation of soles
18. Moothra madhuryam	Sweetness of urine

General Features

The characteristic features of all types of *prameha* are *PRABHOOTHA and AAVILA MOOTHRATHA & MEDO DUSHTI LAKSHANAS* - { excessive urination & turbidity in urine and symptoms of vitiated medodhatu

Prameha upadravas {Complications of *prameha*}

Doshas which are involved in pathogenesis of the disease. This may further complicate the problem and must be considered in the management of the original disease, that is called upadrava. Individual suffering from *prameha* usually seeks to doctor's help when the complications have developed. Fatigue, excessive thirst and excessive urination are some of the symptoms for which the diseased person approaches physician. *Susrutha* has described *prameha* complications according to *dosha* predominance. *Briha Thrayees* have described *prameha pidaka* as a major complication of *prameha*. *Susrutha* has mentioned "*Malabandhata*" (constipation) as a commonly observed complication as the body of the diseased person is loaded with meda hence they do not respond to common purgatives in usual doses. Modern Physiological theories attribute this complication to the involvement of autonomous nervous system.

The following symptoms under each category of kaphaja, pithaja and vathaja describes the dominant element in each diabetic patient. *Doshas* which are involved in the pathogenesis of the disease may further complicate the problem and must be critically considered in the management of the original disease. This element in the treatment is called upadrava. In most

cases it is only after the complication have developed, individuals suffering form prameha seek a physician's advise.

Sustrutha notes that Dosha predominance is a primary factor in prameha complication. Susrutha documents that 'malabandhata'(constipation) is a complication of this disease, because the individual has a concentration of meda. The average doses of laxatives are not effective in these cases.

Brihathrayees (Susrutha is one of the Brihathrayee writers) have described prameha as pidika (diabetic carbuncle) as a major complication of prameha.

Kaphaja

<i>Avipakam</i>	- indigestion
<i>Aruchi</i>	- Loss of appetite
<i>Chardi</i>	- Vomiting tendency
<i>Athinidra</i>	- Excessive sleep
<i>Kasam</i>	- Cough
<i>Peenasam</i>	- Cold with running nose

Pittaja

<i>Vasthimehanyotoda</i>	- Pain in Bladder & urinary path
<i>Mushkavatharanam</i>	- Pain in testes
<i>Jwara</i>	- Fever
<i>Daham</i>	- Burning sensation
<i>Trishna</i>	- Thirst
<i>Amlika</i>	- Acidity
<i>Moorcha</i>	- Giddiness
<i>Vitbhedanam</i>	- Loose Motion
<i>Hridayashoola</i>	- Pain in heart region
<i>Nidranasam</i>	- Loss of sleep

Vathaja

<i>Udavartham</i>	Upward movement of vatha.
<i>Kambam</i>	Tremor
<i>Hridgraham</i>	Gripping pain in chest region
<i>Lolatha</i>	Affinity
<i>Soolam</i>	Pain

<i>Anidratha</i>	Insomnia
<i>Sosha</i>	Wasting
<i>Kasam</i>	Cough
<i>Swasam</i>	Difficulty to breath
<i>Badhapureeshathwa</i>	Constipation

Prognosis

This classification has been given by *Charaka*. The three types of *prameha*.

1. Sadhya - curable
2. Yapya - Palliable
3. Asadhya - Incurable

Sadhya: Describes patients who have been diagnosed very early in the onset of *prameha*. In this category of patients , there can be those who are *sthoola*[obese] and the origin of their disease is in *apathyaja* [poor living habbits]

Yapya: Patients under this catagory have *Pittaja prameha* & certain types of *kaphaja prameha*.How ever *Yapya* {palliable} helps control the disease with treatment

Asadhya: Describes the incurable version of *prameha* & inherited diabetes.Sahaja patients suffering from this veriety are *Krishha* {lean}

Involvement of ojus in Prameha

Ojus is the essence of life, an extract of the seven dhathus {Elements}represented as *bala* {strength }of the body. The ojus in a healthy person determines the physical, Psychic, sensory motor functions of the body. The biochemical component of the body which is reddish, white, slightly yellowish in colour residing in heart and other vital organs of the body. If ojus is distrubed, degeneration will be fast and result in decreased life span. In *prameha* the ojus (life essence is expunged from the body through all *navadwaras* especially through urine & sweat.)

Ojus gets imbalanced in *prameha* in two ways:

- 1) Through obstruction in blood vessels {*srothorodha*}
- 2) Degeneration of the body components is *dhatu kshaya* this can cause both cardiac & nervous system disorders.all this is *ojakshaya* meaning an imbalance in Ojus.

Management of Prameha

According to *Ayurveda* the line of treatment of *prameha* is strictly on individuals constitution. A special case sheet to analyse diabetes is developed as follows

- 1) The prakrithi of the patient
- 2) Dosha predominance of disease
- 3) Dooshya vitiation
- 4) Obstruction in srothus
- 5) Manasika Prakrithi
- 6) Ahara & Vihara
- 7) Hereditary factors etc...

This case sheet gives the profile of the patient & the pathology of the disease in accordance based with classical diagnostic skills in accordance with the classical way of diagnosis. After grouping the patient into different prakrithi, we were able to fix the line of treatment according to the types of the disease.

In general Type 1 Diabetes Mellitus {Vathaja prameha} Patients are advised to have Bhrimhana medication & diet which increases dhathus in the body

Line of treatment

In Type 2 Diabetes, obese diabetic patient with optimal body strength having intense increase of doshas, Purification of the body is advocated This is dependent on dosha predominance {Kaphaja are advised to have emetics, Pittaja are advised to have purgation.}

- 1) *Snehanam* { *prescription of oils internally & externally*
- 2) *Sodhana* { *Purification therapy under three catagory*
 - a. *Vamanam*
 - b. *Virechanam*
 - c. *Vasthi* (This process is the application of medicine through the anal route. This is indicated only in specific condition)
- 3) *Samanam*
- 4) *Pathya – Apathyas*
- 5) *Vyayamam* (exercises)

In strong prameha patients, but with increased doshas, sodhana chikilsa is prescribed. The Purification Therapies are the foremost treatment in this condition. Snehana karma should be done before giving *sodhana* chikilsa. Generally swedana is contra indicated in Prameha as *swethathi pravrutthy* (profused sweating) is one of the main symptom of prameha. Moreover *swedana* induces kleda which is a causative factor for this disease. Different snehanas (oliations) are advised in different stages of prameha.

In our classical texts there are prescriptions of medicated ghees and oils (dhanwantharam ghrutham, thrikandakathi ghrutham are some of them). For this process, Nagarjuna pharmacy has developed 3 special products which can be administered in different dosha conditions.

- Arjuna Sarshapa for Kaphaja types;
- Arjuna Grutham for pitha type and
- Arjuna Thailam for Vatha type.

After snehana, one should undergo virchanam or vamana or both. This is determined on the predominant doshas. This can be done by classical shodhana oushadha. After shodhana chikilsa, shamana chikitsa is advised. The drug of choice must be both dosha shamana and roga shamana.

Nagarjuna has developed some effective combination of medicines for different doshas

Type of Prameha	Drug of choice (name of kashayam)
Kapha	Bhadrashree Kashyam Chavyadi Kashayam
Pitha	Chathusaram Kashayam Thrijathakam Kashayam
Vatha	Khadirathi Kashayam Musthaabhayadi Kashayam

With the above shamana medications some more effective yogas also can be given for better results. They are:

- a) Diarid Powder
 - b) Diamel Powder
 - c) Melhar Powder
 - d) Meha Liquid
- In hyper cholesteremic conditions Daru haridrathi choornam is found effective.
 - In neuropathy conditions Elagulgulu choornam and,.
 - In dhathukshaya condition, Silajathu kalpam is advised for better results
 - With this classical line of treatment, we are able to withdraw modern hypoglycemic medicines gradually.
 - Snehana and shodhana must be repeated in a definite intervals; depending upon the condition of the disease.

The drastic disease diabetes can be controlled by giving comprehensive attention to 3 aspects They are 1) Ahara (Diet)

2) Vihara (Exercise)

3) Aushadha (medicine)

The role of ahara & Vihara are equally or even more important in diabetes to control blood sugar level as well as to prevent complications of this disease .In all classics, ahara dravyas are described in detail & they cover all the food groups are noted in the following table:

Ahara group	Name of pathya ahara
Cereals	Yava -Barley{ Chenopodium Album} Godhooma -Wheat Shyamaka Kodrava Bajara
Pulses	Mudga { Green gram} Chanaka { Gram}
Vegetables	Thiktha shakas Medhika Nimba { Azadirachta Indica} Karavella { Momordica charantia} Patola {Trichosanthes Anguina Rasona -Garlic Udmbara {Ficus racemosa}
Fruits	Jambu{Black berry}Syzygium cumini Tala phala {Borassus flabellifer} Kharjura { Phoenix sylvestris}
Seeds	Kamala { Nelumbo nucifera} Utpala {Nymphaea Stellata}
Flesh	Harina –Deer flesh Shashaka –Rabbit Birds like Kapotha, Titira

Liquor	Old sura {Old wine} Mustard
Oils	Ingudi {Balanitis aegyptiaca} Ghritha may be used in pithaja prameha

Clinical observation on role of classical approach in the management of Prameha

Observations & results

The present study highlights the observation & results of clinical trial conducted in various Nagarjuna diabetic clinics in Kerala. These studies evaluate the efficiency of classical line of treatment, not only controlling blood sugar & urine sugar levels in diabetes mellitus, but also to control all the complications of prameha. The data indicates that the high incident rate of disease is more affecting the patients between the age range of 40-60 years. Our all trials have been significantly positive in curing these diseases.

Summary

The most common problem in diabetic patient is a general body weakness & a fast deterioration of the major organs affecting all physiological systems including the mind.

Mild forms of snehana, shodhana & Shamana treatments accompanied with drugs formulated for this protocol has been very effective in controlling Kaphapitta type of prameha.

In addition there has been a measure of success in treating chronic vataja prameha with classical treatment.

Ayurvedic Approach to diabetes

We made a protocol according to the classical line of treatments as follows

1. *Snehana*
2. *Shodhana*
3. *Shamana* with proper ahara & vihara

Patient sample

30 diagnosed cases of diabetes mellitus were selected. 70 percentage were males & 30 percentage were females. The group of population was between 40-60 years. All participants were non insulin dependent following a protocol of western medicine {allopathic medicine}

Treatment schedule

First stage : All patients were given, snehana for 5-10 days. The medicines used were

- Arjuna Thaila
- Arjuna ghritha &
- Arjuna Sarshapa

The dose varies from 25 to 50 millilitres every day at bed time.

Second stage : Virechana was done in all cases with various virechana oushadhas depending in the condition.

Third stage: Samana oushadhas like kashayas were prescribed for two weeks powders and liquids were also given of better results.

All medicines were specially made for this specific populations indicated in different samhithas.

Parameters for study

Subjective parameters such as numbness, tingling sensation, pain burning sensation, limb weakness, thirst, body weakness and over sweating etc .along with blood sugar level, urine sugar level total insulin assay and C-peptide assay etc were also tested & documented before & after the treatment .

Results

Among 30 cases with allopathic medication, 21 showed excellent response after shodhana it self. During shamana chikitsa, blood sugar level showed a little increase initially on stopping modern medication. This changed to normal gradually. The complaints also decreased. On continuation of samana chikitsa .both F.B.S. & P.P.B.S. attained normal level and the complaints of the patients also were relieved in a period of three to four months. Samana chikitsa and periodical sodhana chikitsa were continued in these patients .For the next three years of treatment continued, and the blood sugar as well as urine sugar levels were noted normal. There after the medicine was stopped completely. For next one year after the stopping of medicines not even a single patient reported the complaints of diabetes mellitus either physically or analytically. These patients have been checking their blood sugar level regularly at periodical intervals.

Conclusion

It is critical to recognise that ancient ayurvedic scholars had an in depth knowledge and understanding of diabetes. They were wellversed in the management of this disease and had indepth skills in working with its complications. Insulin dependent diabetec individuals have to

be treated very very cautiously and its management has to be metticolous. The clinical trials conducted at this institution for the past decades brings forth the following conclusions.

- 1) Ayurvedic line of treatment for diabetes is very fundamental & it should be followed as a course of treatment.
- 2) According to ayurvedic principles, there is no single drug remedy for diabetes
- 3) *Snehana & shodhana* are the basic treatment methods which should be employed in all patients, depending upon the condition
- 4) Shamana treatment is given after the above mentioned treatments, using different combinations of herbal medicines as per the condition
- 5) Classical line of treatment is the best way to approach the treatment of diabetes
- 6) The non insulin type can be very effectively controlled & sugar level can be braught to normal within three weeks by the above treatment. It can be maintained at normal level by the continuous use of ayurvedic medicines. Classical medication as well as our special medicines are safe in the management because these medicines will not lead to hypoglycemic episodes or other complications.