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) Apathyanimittaja 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 vyadhī*, the relative predominance of any one *dosha* and *dooshya* enables its classification into Velhaja, Pithaja and Kaphaja pramehas.

These have further been classified into twenty subcategories in all the three classics of Ayurveda. *Kaphaja and Pittaja prameha* have been subclassified into ten types and six types respectively. These sixteen types have the physical characteristics of urine that is colour, density and volume depending upon the different gunas of *Kapha* and *Pitta*. *Vataja prameha* has been subclassified into four types depending upon *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 classify *prameha* according to *dosha* predominance. They are

1) kapaha,
2) pitha,
3) vatha,
4) kapha-pitha,
5) kapha-vatha,
6) pitha-vatha, and
7) vatha-pitha-kapha.

In these types *sannipatha*, *kevala vatha* and some stages of *kapha-vtha* and *pitha-vatha* 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. *Sweda*  
   Profuced sweating
2. *Angagandham*  
   Foul smell of the body
3. *Anga shidhilathwam*  
   Looseness the body
4. *Sayyasna swapnasukhhabhangithwam*  
   Feeling of lethargy
5. *Hridayopadeham*  
   Feeling of some thing coated or heaviness of Hridaya
6. *Netropadeham*  
   Feeling of some thing coated
on eyes

7. Jhwapadeham  sensation of a coated tongue
8. Shravanopadeham  Feeling of coating on ears
9. Anga ghanatham  Heaviness of body parts
10. Keshathivridhi  Excessive growth of hairs
11. Nakshathivridhi  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. Sussrutha 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**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avipakam</td>
<td>indigestion</td>
</tr>
<tr>
<td>Aruchi</td>
<td>Loss of appetite</td>
</tr>
<tr>
<td>Chardi</td>
<td>Vomiting tendency</td>
</tr>
<tr>
<td>Athinidra</td>
<td>Excessive sleep</td>
</tr>
<tr>
<td>Kasam</td>
<td>Cough</td>
</tr>
<tr>
<td>Peenasam</td>
<td>Cold with running nose</td>
</tr>
</tbody>
</table>

**Pittaja**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasthimehanyotoda</td>
<td>Pain in Bladder &amp; urinary path</td>
</tr>
<tr>
<td>Mushkavatharanam</td>
<td>Pain in testes</td>
</tr>
<tr>
<td>Jwara</td>
<td>Fever</td>
</tr>
<tr>
<td>Daham</td>
<td>Burning sensation</td>
</tr>
<tr>
<td>Trishna</td>
<td>Thirst</td>
</tr>
<tr>
<td>Amlika</td>
<td>Acidity</td>
</tr>
<tr>
<td>Moorcha</td>
<td>Giddiness</td>
</tr>
<tr>
<td>Vithbedanam</td>
<td>Loose Motion</td>
</tr>
<tr>
<td>Hridayashoola</td>
<td>Pain in heart region</td>
</tr>
<tr>
<td>Nidranasam</td>
<td>Loss of sleep</td>
</tr>
</tbody>
</table>

**Vathaja**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udavartham</td>
<td>Upward movement of vatha.</td>
</tr>
<tr>
<td>Kambam</td>
<td>Tremor</td>
</tr>
<tr>
<td>Hridgraham</td>
<td>Gripping pain in chest region</td>
</tr>
<tr>
<td>Lolatha</td>
<td>Affinity</td>
</tr>
<tr>
<td>Soolam</td>
<td>Pain</td>
</tr>
</tbody>
</table>
Anidratha  Insomnia
Sosha     Wasting
Kasam     Cough
Swasam    Difficulty to breath
Badhapureeshathwa 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 category 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 variety are Krisha {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 disturbed, 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) *Vayyamam* (exercises)

In strong prameha patients, but with increased doshas, sodhana chikilsa is prescribed. The Purification Therapies are the formost treatment in this condition. Snehana karma should be done before giving sodhana chikilsa. Generally swedana is contra indicated in Prameha as *swethathi pravruthy* (profuced 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 ousadhya. 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

<table>
<thead>
<tr>
<th>Type of Prameha</th>
<th>Drug of choice (name of kashayam)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapha</td>
<td>Bhadrashree Kashyam</td>
</tr>
<tr>
<td></td>
<td>Chavyadi Kashyam</td>
</tr>
<tr>
<td>Pitha</td>
<td>Chathusaram Kashyam</td>
</tr>
<tr>
<td></td>
<td>Thrijathakam Kashyam</td>
</tr>
<tr>
<td>Vatha</td>
<td>Khadirathi Kashyam</td>
</tr>
<tr>
<td></td>
<td>Musthaabhtayadi Kashyam</td>
</tr>
</tbody>
</table>

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 cholesterolemic 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:

<table>
<thead>
<tr>
<th>Ahara group</th>
<th>Name of pathya ahara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals</td>
<td>Yava {Barley} Chenopodium Album</td>
</tr>
<tr>
<td></td>
<td>Godhooma {Wheat}</td>
</tr>
<tr>
<td></td>
<td>Shyamaka</td>
</tr>
<tr>
<td></td>
<td>Kodrava</td>
</tr>
<tr>
<td></td>
<td>Bajara</td>
</tr>
<tr>
<td>Pulses</td>
<td>Mudga {Green gram}</td>
</tr>
<tr>
<td></td>
<td>Chanaka {Gram}</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Thiktha shakas</td>
</tr>
<tr>
<td></td>
<td>Medhika</td>
</tr>
<tr>
<td></td>
<td>Nimba {Azadirachta Indica}</td>
</tr>
<tr>
<td></td>
<td>Karavella {Momordica charantia}</td>
</tr>
<tr>
<td></td>
<td>Patola {Trichosanthes Anguina}</td>
</tr>
<tr>
<td></td>
<td>Rasona {Garlic}</td>
</tr>
<tr>
<td></td>
<td>Udmbara {Ficus racemosa}</td>
</tr>
<tr>
<td>Fruits</td>
<td>Jambu {Black berry} Syzygium cumini</td>
</tr>
<tr>
<td></td>
<td>Tala phala {Borassus flabellifer}</td>
</tr>
<tr>
<td></td>
<td>Kharjura {Phoenix sylvestris}</td>
</tr>
<tr>
<td>Seeds</td>
<td>Kamala {Nelumbo nucifera}</td>
</tr>
<tr>
<td></td>
<td>Utpala {Nymphoea Stellata}</td>
</tr>
<tr>
<td>Flesh</td>
<td>Harina –Deer flesh</td>
</tr>
<tr>
<td></td>
<td>Shashaka –Rabbit</td>
</tr>
<tr>
<td></td>
<td>Birds like Kapotha, Titira</td>
</tr>
</tbody>
</table>
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 this 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 ms 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 itself. 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. Thereafter, 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 diabetic individuals have to
be treated very very cautiously and its management has to be meticulous. 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 brought 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.