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# Understanding of *Nidana Panchaka* w.s.r. to *Samprapti* of *Madhumeha* with different View

Author: Pooja Badani<sup>1</sup>

Co Authors: Hitesh Vyas<sup>2</sup>

<sup>1,2</sup>Department, Shri O.H. Nazar Ayurveda Collage, Surat, Gujarat, India

## ABSTRACT

Among all dreadful conditions arising because of modern day living, Diabetes is a giant disease considered as one of the arch enemy of the mankind caused by improper diet and lifestyle. It is often referred to as a 'Silent Killer'. Diabetes and its complications pose a major threat to public health resources throughout the world. So it is like to understand how *Prameha* is arising as preventive aspect of *Ayurved*. Also holistic approach of *Ayurveda* in regard to preventive, promotive and curative measures with due consideration of appropriate diet & lifestyle to provide better health by preventing *Samprapti*. Taking these facts in focus, trying to elaborate all the aspect of *Samprapti* of *Prameha*.

**Key Words** *Prameha, Samprapti, Diabetes*

Received 05<sup>th</sup> May 18 Accepted 14<sup>th</sup> September 21 Published 10<sup>th</sup> November 2021

## INTRODUCTION

*Prameha* is a syndrome which includes all those clinical conditions which are characterized by increased quantity of urine associated with or without the increased frequency of micturition. All urinary track syndrome can be included in *Prameha*. Polyurea and turbidity of the urine are the two essential presenting features of his diseased state. Diabetes Mellitus on the other hand is defined as clinical syndrome associated with hyperglycaemia with or without glycosuria due to defective insulin – characterized polyuria, polyphagia and polydypsia. Thus *Prameha* refers to repeated (*Prakarsha*) excessive (*Prabhoota*)

and turbid urination in terms of frequency, quantity and clarity.

*Utpatti of Prameha*<sup>1</sup> is given by *Charakacharya* in *Nidansthana*. He described that *Prameha* and *Kushtha* are produced by the intake of *Havish* (one type of ghee).

Definition of *Prameha*:

The term '*Prameha*' has two parts. '*Pra*' meaning abundant, and '*Meha*' meaning 'passing of large quantity of urine. Incidentally the term diabetes has been derived from the Greek term '*Diabainein*' to mean 'to cross through a siphon' meaning continuous free flow of water and applied to mean elimination of large quantity of Urine. Thus the terms '*Prameha*' and '*Diabetes*' are synonyms.



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“Prakarsena Prabhutam Pracuram Varam Varam Va Mehati Mutratvagam Karoti Iti Pramehah”<sup>2</sup>

### BHEDA: (Classification)

On basis of *Samprapti*, three different classifications have been suggested.

A) *Hetu Bheda*<sup>3</sup> - *Sahaja* and *ApathyaNimittaja*

B) *DehaprakrutiBheda*<sup>4</sup> - *Sthula-Balavan* and *Krisa-Durbala*

C) *DoshikaBheda*<sup>5</sup> - *Kaphaja*, *Pittaja* and *Vataja Bija Dosha* and *KulajaDosha*<sup>6</sup> have been said in cause of *Sahaja Prameha*. This patient is seen weak, wasted, afflicted with excessive thirst, loss of appetite and need to be treated with nutrition.

The *Sthula* and *Krisa* classification are depend on obese and non-obese division. Obese patients are said to be *Kaphapradhana* hence need *Apatarpana* (reducing) therapy due to *Kapha*. *Krisa* patients are weak and are to be treated with *Santarpana* (nourishing diet) because *Vata* is associated here<sup>7</sup>.

The *Sthula* and *Krisa* classification though is based on the constitution of the patient, *Sthula* is said to be strong and *Krisa* is said to be asthenic.

In a *SthulaMadhumehi* it can be considered that it is *Jatottoraja* (*ApathyaNimittaja*), *Kaphapradhana/ Avritta vataja Madhumeha* and initiate stage of *Madumeha*.

*Krisa Madhumehi* can be *SudhaVataja*, *Janma Jata* (*Sahaja*), *Kulajata*. This may be a later stage of *Kapha Madhumeha*.

(1) The disease was latent all this time and the *Kapha* stage was not actually recognized and the patient has already reached *Vata* stage.

(2) There has been very rapid development of *Madhumeha* with the gap between *Kapha* stage and *Vata* stage being greatly reduced

(3) It is a *Sahaja*, or *Kulaja* or *SuddhaVatajaMadhumeha*.

In the discussion above, it is assumed that *Sthula* and *Krisa* classification is for *Madhumeha* and not for *Prameha*, hence some unusual terms like *VatajaMadhumeha* and *KaphajaMadhumeha* etc. This aspect is dealt elaborately in the coming pages.

The literature is so limited that it adds only to the confusion already created. The description allows one to think that basis for classification is just physical appearance of urine. Even *Vagbhata* accepts that the basis for the division is only the variation in the colour, taste, etc., of the urine<sup>8</sup>. It would have been very clear, no confusion would have arise if *Prameha* was simply considered as a group of urinary disorders with a varied etiology, kept under this head only because of their commonness in afflicting the urine. But this is not the case. Confusion arises when *Charaka* binds them in a common *samprapti*<sup>9</sup> and deepens the confusion by stating that if not treated properly all types of *Pramehas* end up as *Madhumeha* which is the incurable state<sup>10</sup>.

A critical analysis of the sub types of *Prameha* shows what the changes observed in colour, Density, etc., of urine and also etiology and pathology varying.

### GIANT METABOLIC COMPLEXES:

From two points 1. *Hetu* : 2. *Linga*.

#### 1. *Hetu* :



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*Samavayi Karana* - all body tissue

*Asamavayi Karana* - *Doshadusya Sammurchana*

*Nimitta Karana* - Vata, Pitta, Kapha like active agent.

*Sahakari Karanas* - Different foods, drugs, activities which excite *Doshas* to produce disease.

Before going to the *Samprapti* few lines for the *Nidana* are presented here are:

1. The first and foremost causes are the diet, drinks, and activities which increases *Kapha* – *Meda* – *Mutra*. Sweet, sour, salt, *Anupa mamsa*, sugarcane, jaggery, milk products, indulges in sitting and sleeping in unnatural manner etc. For example, in this modern age *Asyasukhas* like working habits are seen especially in those peoples as well as in those doing executive jobs like doctors, advocates, businessman, political leaders etc. Though they have the less physical exertion as compared to field workers, labourers and farmers but contrary to that they have more mental work. *Maharsi Charak* has also enlisted mental cause like *Shoka* & *Manodvega* (anxiety & excitement) as predisposing cause of *Madhumeha*. It means these persons use to take their meal in an erratic manner when utilization is not proportionate. Though it's a *Santarpano*tha but actually it is *Apatarpana* way for body tissue.

2. What are the specific causes of *Vatika Prameha* in classics:

Astringent, Pungent, bitter, rough, light and cold, sexual intercourse in excess, physical exercise, emesis, purgation, non-unctuous enema and hard evacuations all in excess, suppression of natural

urges, tasting, injury, exposures to the sun, excitement, anxiety, excessive blood letting, uneven body postures etc.

*Samprapti* comprises the following 6 components.

1. *Dosha* 2. *Dusya* 3. *Srotas* 4. *Agni* 5. *Manasika Dosha* 6. *Dhatugata Ama*

1. **Dosha:** *Tridosha*, *Vata*, being most predominant may be provoked by obstruction

2. **Dushya:** Generally all the *Dhatus* are vitiated but the main *Dhatus* are -

*Abaddha Meda*- Surplus and unutilized fat or adipose tissue.

*Mamsa* - Muscle tissue

*Kleda* - Body fluid – the extra and intra cellular fluid

*Shukra* - Semen *Lasika* - Fluids & Plasma

*Shonita* - Blood

*Vasa* - Muscle fat

*Majja* - Marrow tissue which meant for resistance & immunity.

*Rasa*- first stage of digested food or plasma

*Oja*- essence of *Dhatu*.

3. **Srotas :** Main *Srotas* are *Mutra* & *Medovaha Srotas*. The type of pathological changes may be *Atipravrtti* and *Vimargagamana*.

4. **Agni :** At *Dhatu* level it is clear that *Ama* are of two types:

1. *Dhatugata*

2. *Dhatvagnimandyajanita*.

1. Most of the people experienced boiling of pulse for “Dal Preparation”. During this process if the proportion of Time & Agni for boiling is not proportionate the pulse becomes a special



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hard unlike the original dal (pulse) & boiled dal (pulse). If more heat is supplied to boil (second time) then in that unprocessed/misprocessed pulse, no significant change can be drawn. This means that during second time Agni was proportionate but *dal* was not proportionate or fit for *Paka*. Here unprocessed pulse is the example of *Dhatugata Ama*.

2. What about the immature ripe leaf in a strong stout plant? Though the supplementation of nutrition to each cell of plant is equal but the capacity of that immature leaf to consume the nutrition is poor. Hence it may be considered as *DhatvagnimandyajanitaAma*. Food and nutrition are balanced and useful but Agni is not ready to use due to insufficient capacity of *Parinamana*.

Observing the above two point one can say that for the production of *Ama*, Agni should *Manda* in state. Until and unless *Dhatvagni* does not get *Mandavastha*, it can digest *Ama* which comes (to respected *Dhatvagni*) as *DhatugataAma*. Except the case which involved genetically, in others, the first and foremost cause is the *DhatugataAma* which may be corrected by *Dhatvagni*. But its hypofunctioning helps for the pathogenesis of *Madhumeha*. *Ama* at *Dhatu* level *DhatupradosajaVikaras* are the reflection of *Dhatugata* and *Dhatvagnimandyajanita* state<sup>11</sup>.

In *Madhumeha* there is accumulation of waste matter in body as *Ama* Ex. or stickness on skin and mucous membrane. Considering the insulin utilization by cell it becomes more clear.

1. In case of obese

Due to enlarged fat cells- Decreased No. of insulin receptor- Reduced translocation of GLUT4- Glucose entry into cell- Blood glucose level increases = (glucose toxicity); but there is insulin resistance i.e. hyperinsulinaemia. (This above Flow-chart shows the cause for insulin resistance.) Which further become a cause for the reduce secretion of insulin, due to impaired GLUT2 i.e. impaired entry of glucose to cell. Here, this hyperinsulinemia is a type of *DhatupradosajaKarana* and impaired glucose metabolism is its effect, which is the *Madhumeha*.

**Manasika Dosha:** Mental causes like *Shoka*, *Manodvega* are considered as a predisposing factor for the disease.

**Samprapti :** Though this disease present through a problem of urinary tract but actually total body cells get disturb. Specifically, there is the disturb in fat metabolism. *Kleda* or fluid balance in the body is disturbed. Elementary proportion in fluid get disturbed. Due to the presence of *Ama* proportion between Sara & Kitta get disturbed. Let 'A' is one *Dhatu*. During the *SaraKittavibhajana* at physiological state purity to Sara and Kitta is 100% of each. It means Sara should prepared 100% and Kitta also 100%. But with the presence of *Ama*, Sara and Kitta both are not infiltrated clearly. In 100% of Sara, Kitta may be of (40-50)% & in 100% of Kitta, Sara may be of (40-50)%. Hence, both elimination of Kitta from body and utilization of this type of Sara are harmful or painful to body. Another thing that when it gradually affect to



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neighbourhood *Dhatu* again, what type of imbalance in *SaraKitta* proportion may establish, one cannot imagine. Here the difference is, *Meda* and *AbaddhaMeda*. one is *Prakruta* and another is *Vikruta*. This is the actual cause behind the *Daurbalyata*, *Angasada*, *Alasya*, *Klam* and *Srama*. People follow the so-called eating habit three meals/day, each meal must be filled of required energy. Persons remaining in a stressful condition are also take place *Ama* production. All *KaphavargiyaDoshaDusyas* get vitiated due to same nature of *Ama*. If *Kleda* is vitiated, urine quantity is increased and the *Dhatu*s are also showing out with urine. In a long term *MutravahaSrotas* (nephrons & tubules) are obstructed and kidney disorders take place.

### **Samprapti of Madhumeha :**

*Madhumeha* is one type of *Vataja Prameha*. *Vaghbhatta* divided<sup>12</sup>-

- a. *Dhatukshaya Madhumeha*
- b. *Avaranjanya Madhumeha*.

### **A. Dhatukshaya janya Madhumeha:-**

It also takes place by two ways. i) *Madhumeha* due to *Dhatukshaya*:- *Charaka* explained in *Nidanasthana* that a person after taking *VatikaNidana*, this *Vata* turns the vital *Dhatu*s towards *Basti*. *RukshaVata* converts *Madhura Rasa* of *Oja* into *Kashaya Rasa*. This *Kashaya Rasatmaka Oja* is excreted from *Mutravaha Srotas*. It is called *Madhumeha*<sup>13</sup>.

Here aggravation of *Vata* is due to its *Nidana Sevana*. Which causes diminution of *Dhatu*s. so it is called *Samprapti Vishishta Anilatmaka Madhumeha*.

ii) *Madhumeha* due to *Shuddha Vata* :- *Charaka* explained that due to depletion of *Kapha* and *Pitta* aggravation of *Vata* occurs which then causes the excretion of *Dhatu*s through urine; resulting in to *Madhumeha*<sup>14</sup>.

**B. Avaranjanya Madhumeha<sup>15</sup>** :Due to excess intake of heavy (*Guru*) salty and sour diet, Avoidance of worry, exercise and *Samshodhana* *Kapha* and *Pitta* get provoked and vitiate *Meda* and *Mamsa*; which are present in excess quantity. They cause obstruction to normal pathways of *Vata*. These *Vata* get aggravated and drows out *Oja (Apara)* from all parts of body and carries it towards *Basti* resulting in *Madhumeha*.

### **C. Kalaprabhavaja Madhumeha**

This type of *Madhumeha* is narrated by *Sushruta*. He said that if all types of *Prameha* are ignored or ill-treated they ultimately convert into *Madhumeha*. They become incurable. It probably occurs due to increased involvement of *Vata* and increased complexity of *Dosha-dushya Sammurcchana* and it leads to *Dhatukshaya*.

### **Srotasa involvement:**

As the name *Prameha* indicates that it is a disease related with '*Mutra*', involvement of '*Mutravaha Srotasa*' is mandatory.

*Rupas* are related with findings in *Mutra* and *Purvarupas* indicate the physical signs.

### **Role of Dosha in Samprapti of Prameha :**

All *Acharya* have been mentioned that *Prameha* is *Tridoshaja Vyadhi*. The specific role of *Dosha* in the pathogenesis of *Prameha* is as follows:

*Srotasa Dushti- lakshana*

*Mutravaha - Aavilmutarata, Prabhutmutrata*



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*Udakavaha- Mukha-talu-kanthashosha, Pipasa, Pindikodweshtana.*

*Medovaha - Most of Purvarupa are due to Medovaha Srotasa Dushti e.g. Dantadinam maladyatva, Snigdha-pichchhila-guru gatrata, Daurgandhya, Medoshosha, Angabheda, Dehe chikkanata.*

*Mamsavaha- Putimamsa pidaka, Kaye Malam.*

*Swedavaha- Atisweda, Atishlakshnata, Romaharsha, Sparshavaigunya, Paridaha.*

*Rasavaha- Gaurav, Aalasya, Aruchi, Mandagni, Aasyamadhurya, Shrama, Arasadnyata, Krushangata, Klaibya, Sthaulya.*

### 1. *Kapha*<sup>16</sup>

*Kapha* is the main involved *Dosha* in *Prameha*. *Charakacharya* said that person having more *Kapha Dosha* in body is susceptible to *Prameha*. The first step in pathogenesis is vitiation and *Dushti* of *Kapha*. It causes vitiation of the *Dushya* having same characteristics e.g. *Meda, Mamsa, Rasa, Vasa, Lasika* etc. Again *Chakrapani* has mentioned that *Kapha* having excessive *Dravaguna* can only produce *Prameha* and only *Kapha* has the ability to generate *Prameha*. The symptoms which are produced due to *Kapha* are: *Aasyamadhrya, Aalasya, Shithilangata, Gaurava, Nidra, Tanra, Jatilibhava kesheshu, Madhura and Shuklamutrata.*

### 2. *Pitta*

*Pitta* is the second important *Dosha* involved in the Pathogenesis. *Pitta* is vitiated after the *Kapha* in *Apathynimittaja Prameha*. Both *Kapha* and *Pitta* are causes of *Aavarana* of *Vata*. *Pitta* is responsible for rapid generation of the disease.

There is *Ashrayashrayi Bhava* with *dushya* i.e. *Rakta, Lasika, and Sweda*. The symptoms which are produced due to *Pitta* are: *Pipasa, Kshudhadhikya, Paridaha, Hastapadatala daha, Visrashariragandha, Sweda- daurgandhya* etc.

### 3. *Vata* :

In pathogenesis of *Madhumeha, Vata* is predominant *Dosha*. *Vata* get aggravated either by its own etiological factor or due to *Avarana* by other *Dosha*. Provoked *Vata* carries vital constituents of body like *Vasa, Majja* and *Oja* towards *Basti* and excrete them through urine, results in depletion of *Dhatu*s. In this case function of *Vyanavayu* i.e. *Avyaaahat Gati* gets hampered because of the accumulation of vitiated *Dushya*. Function of *Apanavayu* get aggravated results in excretion of vital *Dhatu*s through urine outside the body. Due to depletion of *Dhatu*s symptoms found are *Karshya, Daurbalya, Angasuptata* and *Parisaranshila* nature.

### Role of *Dushya* in *Samprapti* of *Prameha*<sup>17</sup>

*Sushrutacharya* described the various *dushya* involved in each type of *Prameha*. The detail description of *Dushyas* are as follows –

#### 1. *Rasa*<sup>18</sup>

*Rasa* possesses same quality as that of *Kapha* which is also *Mala* of *Rasadhatu*. *Rasa* is the first *Dhatu* in the body. And other *Dhatu* of the body are nourished by *Rasadhatu*. Therefore we can say that there is defective transportation of nutrients qualitative and quantitative. The symptoms which are produced due to vitiated *Rasa* are: *Sthaulya, Karshya, Gaurava, Hrullasa, Tandra, Aalasya, Srotorodha* etc.



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### 2. Rakta

*Rakta* is *Ashrayi Dhatu* of *Pitta*. Therefore when *Pitta* gets vitiated there is vitiation of *Vata* also. *Rakta* can be considered as the normal blood circulation all over the body. Therefore in *Raktadushti*, cellular utilization of glucose may be disturbed due to defect in vascular system. The symptoms which are produced due to *Rakta* are: *Vidradhi*, *Pidaka* etc.

### 3. Mamsa

*Mamsadhatu* composes the muscular structure of the body. It has same characteristics as that of *Kapha*. So, it also gets easily vitiated by the *Nidana* of *Prameha*. In *Prameha* there is laxity of the body due to looseness of muscles and *Karshya* due to atrophy of muscles. The muscular strength may also be reduced. The symptoms produced due to *Mamsa* are: *Putimamsa-pidaka*, *Shithilangata*.

### 4. Meda

This is the most vulnerable *Dushya* to get incorporated with *Kapha*. Again *Kapha* and *Meda* are of same *Guna*. The characteristic described for *Meda* in *Prameha* is *Bahu-abaddha*. It can be correlated with elevated triglyceride etc. concentrations due to impaired suppression of lipolysis i.e. *Meda Dhatvagnimandya*. Therefore unutilized triglycerides or fatty acids may be said as *Ama*. The symptoms which are produced due to *Meda* are: *Atikshudha*, *Atitrushna*, *Daurgandhya*, *Swedadhikya* etc.

### 5. Majja

*Kshaya* of *Majjadhatu* is seen mainly in *Vataja Prameha*. It may suggest involvement of the nervous system. Therefore the symptoms peripheral neuritis, burning sensation etc. are seen. The symptoms which are produced due to *Majja* are: *Murchchha*, *Angagaurava*, *Netragaurava*.

### 6. Shukra

*Prameha* is disease which also results of 'Beejadoshha'. *Shukra Dhatu* is responsible for reproduction. Sex debility and impotency in the patient of *Prameh* are seen due to vitiation of *Vyana* and *Apanavayu* along with *Shukradhatu*.

### 7. Kleda

*Kleda* is important *Dushya* after *Meda* in *Prameha*. Due to *Kledavruddhi*, *Bahumutrata* and *Aavilamutrata* are produced. *Kleda* can be taken as body fluids. Due to excessive loss of fluid in urine, symptoms of *Shosha* i. e. dryness of throat, mouth, palate and thirst are produced.

### 8. Oja

*Oja* is essence of all *Dhatu* and it is affected in *Vataja Prameha* i.e. *Madhumeha*. *Oja* is responsible for vitality and strength of the body<sup>19</sup>. According to *Chakrapani Aparajita* *Oja* is vitiated in *Prameha*. The symptoms which are produced due to *Oja* are: *Tandra*, *Nidra*, *Murchchha*, *Mamsakshaya*, *Moha*, *Daurbalya*, *Gurugatrata* etc.

### 9. Lasika

*Lasika* is *Dushya* in *Hastimeha*. It is the fluid situated in between *Mamsa* and *Twak* i.e. tissue fluid. The symptoms which are produced due to *Lasika* are *Swedadhikya*, *Pichchhilamutrata* etc.



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### 10. Vasa

*Vasa* is *Upadhatu* of *Mamsadhatu*. It is described as *Sneha* of *Shuddha Mamsa* by *Sushruta*. It can be correlated with the visceral fat in the body. The symptom produced due to *Vasa* is *Pramehapidaka*.

#### Role of Agni and Ama in Samprapti:

*Acharya Gananath Sen* termed the disease *Madhumeha* as *Dhatvagni vikruti janya*.

The importance of *Agni* is described by *Charaka* as<sup>20</sup>—

It means that *Agni* is responsible for all normal functioning of the body. The *Agni* is disturbed, all diseases are manifested. According to *Sushruta*, *Samprapti* of *Prameha* takes its root from the *Ama* only. *Dalhana* adds that not only *Dosha* but *Medadhatu* is also in the *Ama* form. In *Madhumeha* we also get the dominance of *Ama* regarding *Kapha*, *Meda*, *Mamsa* and *Kleda*. As *Prameha* is disease related to metabolism it suggests that there is defect in the *Agni* (*Agnimandya*). There are 3 types of *Agni* stated in *Ayurveda*—*Jatharagni*, *Bhutagni* and *Dhatvagni*.

#### Jatharagni

All intestinal secretions may be said to a part *Jatharagni*. So pancreatic exogenous and secretions can be also a part of *Jatharagni*. It's role in *Madhumeha samprapti* is

-*Aparipakva Vata, Pitta, Kapha*

-*Bahudravashleshma*

**Bhutagni**—Again *Kapha* is composed of *Pruthvi* and *Jalamahabuta*. Therefore defective functioning of *Bhutagni* leads to production of

*Vikruta Kapha* in excess and thereby increases *Madhura Rasa* in the body.

**Dhatvagni**—This is the main level of disturbance in *Prameha*. *Dhatu* are main building components of the body<sup>21</sup> (*Dehadharaka*). The *Dhatvagni* of respective *Dhatu* in its natural state is essential for its *Paka*, *Brumhana* and *Tarpana*. In *Prameha* either qualitative or quantitative in *Dhatvagni* take place particularly *Rasa*, *Rakta*, *Mamsa*, *Meda*, *Majja* and *Shukra Dhatvagni*. In case of *Aavaranjanya Madhumeha* excessive fat deposition on the body indicated *Medodhatvagnimandya*. The same thing is applicable to another *Dushya* also. Therefore *Agni* plays an important role in *Prameha*.

From the above discussion, we can say that the correction of various *Agni* in *Prameha/Madhumeha* may be a part of treatment.

#### SADHYATA-ASADHYATA

*Charaka* in *Agryasamgraha* has described *Prameha* as<sup>22</sup> highest tendency to recur. This indicates that disease is 'Yapya' in nature and *Yapana* must be carried out over a long duration of treatment. *Vatika*, *Paitika* and *Kaphaja Prameha* are *Asadhya*, *Yapya* and *sadhya* respectively<sup>23</sup>.

**TREATMENT**- In general Type 1 Diabetes mellitus i.e. *Krishna Pramehi* patients are advised to have *Bringhan* medication (Anabolic) as well as a diet which increase *Dhatu* in the body. In type 2 Diabetes, Obese diabetic patients (*Apathyanimittaja Rogi*) with optimal body strength having intense increase of *Doshas*,



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*Samshodhan* (purification) of the body advocated.

1. *Snehana* (preparation of oil internally &externally)
2. *Shodhana* (Purification therapy under three category)
  - a. *Virechana*
  - b. *Basti (Asthapana/Niruha)*
3. *Shamana* with drugs
4. Exercise and life style modification & following regular regimen of exercise, *Yogasana*, *Pranayama* and regular food & sleep, following *Ritucharya & Dincharya*.

**Diabetes can be controlled by giving comprehensive attention to three aspects:**

- (1) *Ahara* (Diet)
- (2) *Vihara* (Exercise)
- (3) *Aushadha* (Medicine)

***Pathya and Apathya-*** *Shyama, Kodrava, Godhum, Chanaka, and Kullatha* which are old-are suitable to be used as foods by patients of *Madhumeha* (Diabetes). Vegetables of bitter taste (*Tikta*), meat of animals and eggs of birds of deserts like regions (*Jangala mamsa*), boiled *Yava* and its preparations, *Mudag, Shali, and Shastika* are all suitable as food. *Shauviraka* (fermented gruel), *Sura* (beer), Buttermilk, oils, milk ghee, *jaggery*, food processed with sours, sugarcane, juice, food prepared from flour, meat of animals of marshy regions should be avoided from use.

***Yoga*** - *Yoga* improves all sorts of metabolism in the body. *Yoga* now-a-days has attracted the attention of Western people. Common *Aasana*

that can be very effective in Diabetes are *Padmasana, Shalabhasana, Mayurasana, Suryanamaskar, Dhanurasana*.

## DISCUSSION

Excessive intake of *Madhura* leads to quantitative increase in *Kaph* and also that of *Kleda*. *Kleda* is a liquid material produced in the body during digestion and it travels along with *Rasa* all over the body helping *DhatuTarpana*. It finally mixes up with urine and is passed out of the body. It is mixture of unwanted and harmful substances in liquid form. The changes in the appearance, colour etc., of urine can be due to two reasons.

- (1) When it contains some abnormal waste products which are not naturally present in the urine.
- (2) Due to various permutations and combinations of the waste products present in the urine.

Thus it becomes clear that for all the abnormalities of urine i.e., *Mutraroga* or *Prameha* to be precise, the main cause seems to be impaired digestion and assimilation of food ingested. This impairment may be due to

- (1) Excessive intake of sweets and fats which cannot be utilized by the tissues, producing undigested products (*Ama*).
- (2) Impaired digestive fire – both at Gastric and tissue levels – *Kayagni* and *Dhatwagni* – again producing *Ama*. In the presence of *Mandagni* the *SnehaBhavas* and *MaduraBhavas* are not fully



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converted to end products and are expelled from the body. Finally *Samprapti* should be worked out based on *DoshaDushyadiBhavas*.

## CONCLUSION

Two types of *Pramehi* are seen i.e *Krishapramehi* & *Sthula Pramehi* as type-I & type-II diabetes respectively. Due to *Dhatavaaganimandya*, *Dhatu* cannot utilized *Ahararasa* for energy & impaired further production of *Dhatu*. This excess quantity of unutilized *Ahararasa* can be consider as *Mala* & excrete out of body as a waste products. Modern therapeutics has many limitation but *Ayurvedic* principles of management can help the patient to have better blood sugar control and routine life. In addition life style modification with adopting proper food habits, yoga & exercise also play very important role in the management of *Madhumeha*.

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