INTERPRETATION OF AVARANA IN THE PATHOGENESIS OF MADHUMEHA

Dr. Mohammad Yaseen. Hullur, Dr. Prashanth A.S M.D(Ayu), PhD, Dr. S.G. Chavan

1 Post Graduate Scholar, 2 Professor & Head, 3 Professor, Department of Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, Karnataka, India.

ABSTRACT
Diabetes is a disease known to the world from ancient times. There are descriptions about this disease in ancient treatises like Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Ashtanga Samgraha etc. Manifestation of Madhumeha happens when Prameha is left untreated. Acharyas have categorized it under Vataja Prakara of Prameha. Sedentary lifestyle and indiscriminate dietary habits are the two biggest reasons responsible for causing Diabetes.

KEYWORDS: Diabetes Mellitus, Madhumeha, Avarana

INTRODUCTION
There is a general notion that Diabetes mellitus is a disease of insulin deficiency. But the recent investigations have proved that in majority of cases there is no insulin deficiency at all. Rather the production of insulin is at a higher rate as compared to normal subjects. In the presence of high concentration of free fatty acid in the blood, it is utilized in energy metabolism; specially in the glucose uptake by the muscle tissue, leading to a state of hyperglycaemia. Therefore, the FFA has been recognized as the insulin antagonist because even in the presence of insulin, the entry of glucose in the tissues for normal metabolism is prevented by free fatty acid.

The Prameha as a disease entity has been recognized since long in Ayurvedic Science. As regards to the origin of this disease, it is traced up to the prehistoric period and Charaka has mentioned that it is a disease which
started during the disruption of Yagnya organized by Daksha Prajapathi. This is related with the eating of Havish, a special type of food made of milk, sugar, rice used for offering in Yagnyas. In Ayurvedic texts, this disease is defined to be characterized with excessive urination and turbidity. The turbidity may vary in colour and concentration, variety etc. depending upon the body reaction with the doshas.

**NIDANA & SAMPRAPTI OF MADHUMEHA**

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<th>Ahara</th>
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<td>Atisevana</td>
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*Sushruta* has categorized the existence of *Sthula* and *Krusha* varieties of *Prameh* and *Charaka* has prescribed different lines of treatment for the *Sthula* and *Krusha Prameh*. He has also asserted that whenever a patient presents with *Madhupama Mutra*, a wise physician should always consider the possibilities of *Madhumeha* due to *Vata* as a result of *Ksheenata* of *Doshas* and *Madhumeha* due to *Kapha* as a result of *Santarpana*.

It is very clear from Charaka’s explanation that *Madhumeha* in *Krusha* occurs in the event of a relative *Vata Vriddhi* in comparison to the other *Doshas*. These persons may have been *Sthula* in the beginning but would have become *Krusha* due to *Dhatu Kshaya*.

On the other hand, *Krusha Madhumehi* are *Rogis* with *Beeja Dosha*. Hence, when such a *Rogi* consumes the *Nidanas* of *Vata Vriddhi*, he develops *Madhumeha* sooner than a *Sthula Rogi* who always indulges in *Tarpana Ahara*. *Sthaulya* is also a condition due to *Beeja Dosha* and this *Beeja Doshaja Sthaulya Rogi* is more under the risk of developing the *Madhumeha* than the *Jatotthara Sthaulya* person.

The *Samprapti* of the *Madhumeha* (Diabetes mellitus) is described separately but narrated with the general *samprapti* of *Prameha*. A separate *Samprapti* of the *Madhumeha* is described in *Charaka Sutra* chapter 17, and *Nidana* chapter 4 and *Astag Hridya* chapter 10. According to *Sushruta*, the excessive indulgence in
the etiological factors related to Prameha results to Aparipakva Vata, Pitta, Kapha and Meda, which further proceed downward through the Mutravaha Srotasa to get localized at Basti Mukha and thus leading to disease Prameha (Su. Ni. 6/4)². Dalhana interprets the term Aparipakva as Ama. Again he asserts that along with Aparipakva Vata, Rasa, Mamsa etc. should also be considered (Dalhana – Su. Ni. 6/4). Sushruta also asserted that, if all the Prameha are treated improperly or ignored get terminated into Madhumeha⁵. Vagbhata narrated pathogenesis of Madhumeha very in two types i.e. Dhatukshayatmaka and Dosha Avaranatmaka⁶. Further, Vagbhata interpreted that in all types of Prameha, the Dosha and Dushya remain same however difference in Mutra Pravritti is due to specific type of Samyoga between specific Dosha and Anukula Dushya.⁷ The Mutra Pravritti also depends upon the Dosha Guna which has been increased and also due to different types of Samyoga of Dosha Gunas with Mutra. Charaka explained the pathogenesis in an elaborating manner i.e. general Samprapti of Prameha and specific Samprapti of different Pramehas⁹. The description of Avarana Janya Samprapti⁹ of Madhumeha is a unique contribution of Charaka to the clinical medical knowledge. Here one can see that Nidana is same as that of Kaphaja Prameha but still the resulting disease is Madhumeha. Guru – Snigdhadi Ahara, Avayamadi Vihara etc., leads to provocation of Kapha and Pitta Dosha inturn increases in quantity of Meda and Mamsa. All these increased factors obstruct the Gati of Vata leading to provocation of Vata. This provoked Vata withdraws Oja from the body and takes it towards Basti and leads to Madhumeha, which is Krichrasadya for treatment due to its origin from Kapha and Pitta Doshas. Initially Vata Dosha remains innocent in the pathology. The Vata, Pitta and Kapha Doshas start manifesting their symptoms intermittently depending on their extent of Dushti. Subsequently Pitta and Kapha attain Kshayavastha compared to Vata; due to Kshaya of Dhatus. This process of Margavarana...
of Vata due to Kapha and Pitta occurs in two kinds of people. First in those who are Sthula and secondly in those who are not Sthula but have indulged in Kapha Medokara Ahara and Vihara. If the Nidana for Pitta are significant then it also gets Dushti. In Sthula people, the Sthaulya is the result of two reasons. First it is due to excess indulgence in Kaphakara Ahara Vihara and second is due to Beeja Dushti. In the former case, the Upachaya of Medas occurs due to the Nidana Sevana. Whereas in the later case, the Medo Upachaya occurs even in the absence of Kapha Medokara Ahara Vihara.

HYPERINSULINAEMIA

Hyperinsulinemia, or hyperinsulinaemia is a condition in which there are excess levels of insulin circulating in the blood relative to the level of glucose. While it is often mistaken for diabetes or hyperglycaemia, hyperinsulinemia can result from a variety of metabolic diseases and conditions. Hyperinsulinemia can be seen in a variety of conditions including diabetes mellitus type 2, in neonates and in drug induced hyperinsulinemia. It can also occur in congenital hyperinsulism, including nesidioblastosis.

Hyperinsulinemia is associated with hypertension, obesity, dyslipidemia, and glucose intolerance. These conditions are collectively known as Metabolic syndrome. This close association between hyperinsulinemia and conditions of metabolic syndrome suggest related or common mechanisms of pathogenicity.

Hyperinsulinemia has been shown to "play a role in obese hypertension by increasing renal sodium retention". In insulin resistant tissues, a threshold concentration of insulin is reached causing the cells to uptake glucose and therefore decreases blood glucose levels. Studies have shown that the high levels of insulin resulting from insulin resistance might enhance insulin resistance.

PANCREATITIS

Transient hyperglycemia is seen in 50% cases of Acute Pancreatitis, whereas 45 – 50% of patients with chronic pancreatitis develop Diabetes over 20 years of follow
up; compromised blood supply to islets from fibrotic scarring of exocrine pancreas may play a role. The diagnosis of pancreatic diabetes caused by chronic pancreatitis may be elusive because it is occasionally painless and often not accompanied by clinical malabsorption until after hyperglycemia occurs. Diabetic patients with pancreatic calcification or clinically demonstrable pancreatic exocrine dysfunction will manifest the unique aspects of pancreatic diabetes.

**CHIKITSA**

Sushruta as described to select drugs, which are having bitter pungent Astringent taste, Katu Vipaka, Ushna Veerya and Shoshaka, Chedana properties in the treatment of Madhumeha (Su.Chi.13/8). Shilajatu, Guggulu & Loharaja are the best medicines in Madhumeha. Phalatrikadi Kwatha, Trikatukadhya, Modaka, Nygrodhadi Churna, Lodhradi Churna, Guduchi Swarasa and Trikatu Gutika in the management of Madhumeha. Bhaishajya Ratnavali describes that Triphala, Lohabhasma, Shilajith, Madhu, Guduchi Swarasa are the drugs of choice in all kinds of Prameha. Madhumehasava, Lavangasava, Madvasava, Chandanasava etc, are useful for Madhumeha12.

**APAKARSHANA**

**MARGAVARANAJANYA**

**MADHUMEHA:** Shodhana especially Vamana should be preferred in a Madhumehi if the Dhatukshaya is minimum & there are Kapha & Medodushti lakshanas. If there are Pittaja lakshanas & Dhatu kshaya does not render the patient Durvirechya, then Virechana can be performed. Similarly, if the Anubandha vata lakshanas are more and the patient is Samshodana arha then Basti can be performed.

**CONCLUSION**

- Margavarana Janya Madhumeha is seen in Sthoola & Balavan, so Apatarpana Chikitsa in the form of Langhana & Nidana parivarjana should be done.
- Madhumeha also manifest as a Paratantra vyadhi secondary to Chronic Pancreatitis, Endocrine tumours, Trauma etc.
- Chronic Pancreatitis, Endocrine tumours causes destruction of beta
cells, this phenomenon can be understood as *Avarana*.

- Endocrine Tumours act as insulin secreting agents and cause hypoinsulinaemia whereas Chronic Alcoholism is a notable reason for hyperinsulinemia in non-diabetics.
- In *Ayurvedic* texts, this disease is defined to be characterized with excessive urination and turbidity. The turbidity may vary in colour and concentration, variety etc. depending upon the body reaction with the *doshas*.

**REFERENCES**


3. Charaka Samhita of Agnivesha, Chakrapani Commentary, Edited by Vaidya Yadavji Trikamji Acharya Ed. 2016, Chikitsa sthana Chapter 6, Shloka 18, Pg.no 446, Chaukhambha Surabharathi Prakashana.


8. Charaka Samhita of Agnivesha, Chakrapani Commentary, Edited by Vaidya Yadavji Trikamji Acharya Ed. 2016, Chikitsa sthana Chapter 6,
Shloka 5-6, Pg.no 445, Chaukhambha Surabharathi Prakashana.


11. API Textbook of Medicine, 8th edition, Edited by Siddharth.N.Shah et al 2008,

Corresponding author: Dr. Mohammad Yaseen. Hullur
P.G.Scholar, Department of Kayachikitsa, Ayurveda Mahavidyalaya, Hubli
Email-yaseenhullur21@gmail.com

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