

A Brief Review on Ayurvedic Management of Madhumeha (Diabetes Mellitus)

¹Dr. P.S.R.S.Pravallika, ²Dr. P. Sai Sudhakar, ³Dr. K. Srinivas.

¹Final year P.G. Scholar, Department of kayachikitsa, DR. N.R.S.Govt.Ayurvedic College, Vijayawada, Andhra pradesh.

²Guide- Principal, Dr. N.R.S.Govt.Ayurvedic College, Vijayawada, Andhra pradesh.

³Co Guide - Assistant Professor, Department of kayachikitsa, DR.N.R.S.Govt.AyurvedicCollege, Vijayawada, Andhra pradesh.

ABSTRACT

Diabetes Mellitus or Madhumeha is one of the oldest documented and most troublesome diseases to mankind. Now a day's becoming more and more prevalent with increasing tend of incidences worldwide. Improper dietary habits, stressful environment and sedentary life style play a crucial role in increasing the risk of diabetes and other life style disorders. There are many pharmacological interventions but they do not aid as permanent solution for efficacious control of the disease and they in turn make the person drug dependent throughout their life. So adaptation of non-pharmacological management like diet, regimen and life style modifications can effectively halt the progression of this highly penetrating disease. There is an ample description regarding regimens, remedies and treatment principle for Madhumeha in Ayurveda. So here an attempt is made to enlist all the treatment principles, drugs (Samanaushadis), diet and regimen mentioned in Ayurvedic classics for the management of Madhumeha.

KEY WORDS: Ayurveda, Madhumeha, Chikitsa, Diabetes mellitus, Diet, Daily regimen.

INTRODUCTION

Diabetes Mellitus is heterogeneous metabolic disorders mainly caused due to impaired Insulin secretion or increased peripheral cellular resistance to Insulin and is characterized by polyuria, polydipsia, polyphagia and glucosuria. Diabetes is mainly classified into 2 types, Type-1 and Type-2 Diabetes mellitus. In Type- 1 diabetes, there will be a destruction of insulin secreting beta cells of pancreatic islets, mainly caused due to genetic, autoimmune and environmental factors. Constitutional factors like obesity, mental stress etc increases the risk of type-2 diabetes by developing the Insulin receptor failure in respond to Insulin. Based on its similarities in etiopathogenesis, clinical features etc., it can be compared with Madhumeha in Ayurveda. Madhumeha is one of the vataja prameha characterized by excessive passage of urine which is sweet-astringent, pale and ununctuous in nature.

Nidhana (Etiology):

- ❖ Aharaja: Excess intake of guru (heavy), snigdha (oily), lavana (salt) and amla (sour) ahara, navannapana (newly harvested rice), gramya oudaka anupa mamsa (meat of domesticated, aquatic and marshy land animals), freshly prepared alcohol etc.
- ❖ Viharaja: Sedentary life style, excessive sleep, lack of exercise, one who does not undergo bio-purification (sodhana) of the body.

Samprapti (Pathogenesis): Vata is the main dosha which is involved in the samprapti of Madhumeha. The vitiation of Vata dosha is may be due to dathu kshaya or marga avarana of Vata by Kapha and Pitta doshas. All the above etiological factors aggravate kapha, pitta and mamsa which lead to obstruction to the gati of vata dosha. The vitiated vata carries ojas to basti (so this is also called Ojomeha)and that ojas sweetish nature is converted into astringent sweet taste, so the urine appears as madhu (so the disease is called as Madhumeha or Ksoudrameha).

Bheda (Types): 1.Sthula pramehi, balavan- obese and strong person.

2. Krishna pramehi, durbala- lean and weak person.

Poorvarupa (Premonitory symptoms):

- Sithilangatha - Flaccidity of body.
- Suptata- Numbness of body.
- Pipasa- Thirst sensation.
- Pipilika in mutra- Ants in urine.
- Alasya- Laziness.
- Karapada daha- Burning sensation in hands and legs etc.

Roopa (clinical features):

Samanya lakshana (General features): (1). Prabhuta mutrata- Increased frequency of micturation.

(2). Avila mutrata- Increased turbidity of urine.

Vishesha lakshana (Specific features): (1). Passes urine which is astringent, sweet, pale and ununctuous in nature.

(2). Smell of the body resembling honey.

Sadhya-asadhyatha (Prognosis):

All the kinds of Prameha if neglected for a long time terminates into Madhumeha, if the treatment is delayed or if medo dathu is vitiated or if excess of dathukshya then Madhumeha will become asadya .

AIMS AND OBJECTIVES:

1. To brief out the line of treatment (Chikitsa) of Madhumeha.
2. To enumerate the Madhumeha's classical Ayurvedic medicines (Samana oushadis).
3. To brief out the diet and other regimen for Madhumeha.

MATERIALS AND METHODS:

Chikitsa¹ (Treatment principles):

Krusa Madhumehi Chikitsa: Sambruhmana chikitsa (nourishing type of medicines and foods).

Sthula Madhumehi Chikitsa: Samsodhana should be followed by santarpana.

Sodhana² Chikitsa:

- Snehana: with Priyangvadi gana siddha ghruta or taila.
- Vamana and Virechana based on underlying dosha.
- Asthapanabasti: Surasadi gana Kashaya with Mahoushadha, Bhadradraru, Musta, Madhu and Saindhava.
- If burning sensation is there after the sodhana then- Nyagrodadhi gana dravyas without oil should be administered.
- In kapha dosha involvement is more then vamana and langhana are indicated. For pitta dosha virechana and santarpana chikitsas are indicated.

Samana Chikitsa:

- If person's bala is less and not eligible for sodhana and after admistration of sodhana chikitsa, samana chikitsa should be administered.

List of Samana Oushadis

Table no-1: List of Samana oushadis mentioned in Ayurvedic literature

Sl.No	Name of the Text	Yogas
Brihat Trayi		
1.	CHARAKA SAMHITA ¹	1.Haridra Amalaki swarasa 2.Darvi, Surahva, Triphala, Musta madhu kashaya 3.Phala trikadi kashaya
2.	SUSRUTA SAMHITA ²	1.Sarva mehantaka yoga 2.Kadara kramuka kashaya 3.Priyangvadhi leha 4.Makshika dathu yoga 5.Silajathu yoga 6.Tuvaraka taila yoga
3.	ASTANGA HRUDAYA ³	1.Dhanvantari ghrita 2.Rodhrasava 3.Ayaskruti 4.Silajatu rasayana
	ASTANGA SANGRAHA ⁴	1.Trikantakadi sneha 2.Dhanvantari ghrita 3.Lodhrasava 4.Dasamularista 5.Loharista 6.Silajathu prayoga
Laghu Trayi		
1.	SARANGADHARA SAMHITA ⁵	Swarasa: Amritha swarasa, Dhatri swarasa. Kashaya: Varadi kahaya, Nyagrodhadi kashaya. Churna: Triphala churna, Tryusana churna, Lavangadi curna. Guda: Bahusala guda. Vataka: Suranadi vataka, Manduradi vataka. Guggulu: Yogaraja guggulu, Kaisora guggulu, Goksuradi guggulu. Ghritha: Paniya kalyana ghrita. Asavaaristas: Usirasava, Kumariasava, Vidangarista, Devadarvarista, Dasamula arista. Rasa oushadis : Chandraprabhavati, Prameha baddha ras
2.	BHAVAPRAKASHA SAMHITA ⁶	Churna: Triphaladi churna, Nyagrodadhi churna, Goksuradi curna. Kashaya: Phalatrikadi kwatha, Kantakari kashaya, Triphaladi kashaya. Gutika: Trikatu gutika, Goksuradi gutika. Ghritha: Dadimadi ghrita. Avaleha: Goksurakadya avaleha. Rasa oushadis: Silajathu prayoga, Makshika prayoga.
Other Classical Texts		
1	VANGASENA SAMHITA ⁷	Churna: Triphala curna with madhu, Haritaki churna with madhu, Nyagrodadhi curna. Gutika: Tryusanadi gutika, Goksuradi curna gutika. Avaleha: Goksuradi avaleha, Saravaleha. Ghritha: Simhamrita ghrita, Dhanvantari ghrita. Taila: Arjunadi taila. Rasoushadis: Silajathu bhasma, Louha bhasma, Swarnamaksika prayoga, Roupya makshika prayoga.

2	BHAI SAYA RATNAVALI ⁸	<p>Churna : Eladi curna, Nyagrodadhi curna, Swarasa : Amalaki swarasa, Satavari swarasa, Guduci swarasa. Kalka: Palasa pushpa kalka. Kashaya: Kadaradi kashaya, Mustadi kashaya, Phalatrikadi kashaya. Avaleha: Kusavaleha, Salasaradi leha, Vangavaleha Ghrita: Dhanvantari ghrita, Dadimadya ghrita, Brihat dadimadya ghrita, Maha dadimadya ghrita Taila: Prameha mihara taila, Devadarvarista Rasoushadhis: Silajatu prayoga, Swarnamakshika prayoga, Mehakalanalarasa, Pancananaras, Chandrakala gutika, Meha mudgara Vatika, Sukra matrika vati, Prameha kulantaka ras, Veda vidya vati, Vangastaka, Mehavajraras, Chandraprabha vati, Pramehaseturas, Mehanada ras, Mehakesari ras, Mehantaka ras, Apurva malini vasanta ras, Pramehachintamaniras, Yogesvararas, Vasanta tilaka, Vasanta kusumakara ras, Indravati, Harisankararas, Brihadharishankararas, brihadkamacudamaniras, vangesvara ras, Brihad vangesvara ras, Swarna vanga, Sarvesvara ras, Vidangadi louha.</p>
3	CHAKRADATTA ⁹	<p>Choorana : Haritaki curna, Triphala curna, Saladi curna, Nyagrodadi churna. Kashaya: Triphaladi kashaya, Phalatrikadi kashaya, Kantaka teryadi kashaya, Kutajadi kashaya. Swarasa: Dathri swarasa, Guduchi swarasa. Taila: Trikantakadya taila Ghrita: Trikantakadya ghrita, Dhanvantari ghrita, Maha dadimadya ghrita. Gutika: Tryusanadi gutika. Avaleha: Salasaradi leha, kusavaleha. Rasousadhis: Loha bhasma, Silajatu prayoga, Swarna makshika prayoga.</p>
4	YOGA RATNAKAR ¹⁰	<p>Swarasa: Bhumyamlaki swarasa. Kalka: Triphala kalka. Churna: Triphala Choorana, Nyagrodhadhi Churna. Kashaya: Kadhira kramuka kashaya, Palasapushpa kashaya, Triphala kashaya, Guducyadhi kashaya, Vidangadhikwatha. Gutika: Goksuradi gutika, Chandraprabha vati. Ghrita: Simhamrta ghrita. Taila: Haridradi tailam. Rasoushadhis: Harisankar ras, Meghanada ras, Meha kunjara kesari, Mehantaka rasa, Mehari ras, Chandra kalavati, Vangeswar rasa, Mahavangesvara ras, Arbraka bhasma, Naga bhasma, Vanga bhasma, Silajatu yoga, Vasantha kusumakara ras, Jalajamrta ras.</p>

Suitable Diet¹:

- Cereals: Yava (Barley), Sastika sali (Type of rice), Purana Sali (Old rice), Godhuma (Wheat), Kodrava. Barley should constitute the principal ingredient of food of Madhumeha patient. Barley preparations- like yavaudana (cooked barley without adding fat), vatya (barley porridge), apupas (barley pancakes) dhana (fried barley) etc, should be used.
- Pulses: Mudga (Green gram), Chanaka (Cicer arietinum), Kulattha (Dilichos biflorus), Adhaki (Cajanus cajanus) etc.
- Oils: Nikumba taila (Baliospermum montanum), Atasi, Sarsapa taila (Mustard oil), Danti taila etc.
- Vegetables: All bitter and astringent taste vegetables like Karela (Bitter guard), Methika (Trigonella foenum), Patola etc.
- Fruits: Jambu, Amra, Dadima, Salmali, Amalaka, Kapittha, Tinduka, Asmantaka.
- Mamsa: Jangala mamsa (Meat of desert animals without fat) consumed without adding sour and ghee.

Unsuitable Diet¹:

- Alcoholic preparations.
- Products of sugarcane, Panaka (Syrups) and other sweets.
- Oily and fatty foods (Oil, ghee, milk preparations like cheese etc).
- Freshly harvested food articles, Yavagu (thick gruel), Pistanna (food prepared from flour).
- Domestic and aquatic animal meat.

Suitable Drinks¹:

- Sarodaka (Water boiled with heart wood of Kadhira).
- Triphala rasa (Swarasa or kashaya).
- Barley soaked in the Triphala kashaya.
- Haridra along with Amalaki swarasa.
- Decoction made of Kadhira and Puga.

Other Regimen

- ❖ **Vyayama²:** Daily indulge in physical activities like walking, walk of foot solidiers, walking briskly, jogging, wrestling, sports, archery, agriculture and animal farm works etc. when patient is too much emaciated should avoid the above said physical activities. Acharya Susrutha mentioned that the Madhumeha patient should undertake a journey on foot, of hundred yojana (600 miles approx) by leading a life of an ascetic and remaining self controlled.
- ❖ **Udvaartana :** Rubbing the body with coarse powders is advised for sthula madhumehi .
- ❖ **Application of ointments¹-** By application of ointment made of usira, tvak, ela, agaru, candana etc drugs complications of Madhumeha like sula (pain), daha (burning sensation), kampa (tremors), stamba (rigidity) etc., can be prevented and controlled.
- ❖ **Nidra:** Adequate and sound sleep is advised and sleeping during the day time is prohibited.
- ❖ **Regular practise of Yoga**
PRANAYAMA : By doing pranayama regularly one of the etiological factor stress can be relieved
 - 1.Surya bhedana pranayama with kumbhaka
 - 2.Bhastrika pranayama with kumbakaASANAS: Uttanapada chakrasana, dhanurasana, udarasanchalan, halasana, mayurasana, matsyasana, ardha matsyendrasana, paschimottasana, sarvangasana, shavasana. Regular practise of asanas stimulates the prancreas and enhances the peripheral circulation thereby complication of diabetes will be prevented.

DISCUSSION

For Madhumeha Ayurveda offers comprehensive safe and effective remedies for the management of disease. In Madhumeha there is a disturbance in the body basic metabolism as the disease vitiates all the dathus, srotas and ojas, which all makes the deterioration of patient condition. So the treatment should be planed based on the bala of the patient. If the patient is strong enough then his body should be purified with sodhanadi karma followed by santarpana, if not then samana chikitsa should be administered immediately. Most of the samana oushadis explained above are of tikta (bitter) and kashaya (astringent) rasa pradhana dravyas, they acts as srotoshodaka (clears channels) and thereby enhances the metabolism at the cellular level and reduces the peripheral resistance to insulin by clearing the excess of free fatty acids. Among samana oushadis silajitu is mostly explained in all the samhitas with utmost importance, mainly it is indicated in the dathuksaya janya vata prokopaja madhumeha, it acts as agnivardaka (enhances digestive fire), srotoshodaka (clears channels) and rasayana (antioxidant and immunomodulator). As madhumeha is mainly of vataja origin, by ghrita and tailas both external and internal administration alleviates vata, gives strength to the person and enhances the ojas thereby complications can be prevented. Asava aristas because of their hot potency may enhances the digestive and absorption capacities and also stimulates the pancreas for their normal functioning. By considering the strength of the person and bala of dosha, administration of any of the above mentioned samana oushadis with yukti gives us wonderful results. Lastly it's better to manage individual through diet and regimens which brings the normal state of dathus in the body rather than pharmacological interventions.

World Health Organisation also opines the same by recommending nutritional supplements in diet, meal planning and exercise. As the sedentary and improper life style increases the risk of diabetes there is a need to incorporate different physical activities like walking, jogging, exercise, yoga etc in our daily routine.

CONCLUSION

As to conclude that even though Madhumeha is considered as very difficult to cure as it is a terminal stage of Prameha, but by prolonged use of conservative treatment like Samana oushadis (internal medication) along with dietary restrictions and exercise and purifying the body with Sodhanadi karma can slowly regulate the metabolic disturbances of the body there by aids in the effective control of the Madhumeha (Diabetes).

REFERENCES

1. Agnivesha, Charaka Samhita, R.K.Sharma Bhagwan Dash, Chowkhamba Sanskrit series office, Varanasi, vol-3, chikitsa Sthana -6 chapter, Pg.No -299-315.
2. Acharya Susruta ,Susruta Samhita, Translated by Prof. K.R.Srikanta murthy, Choukhambha orientalia, Varanasi, Volume-2, Chikitsa sthana -11 chapter, Page no:124 -129.
3. Vagbhata, Astanga hrudayam, Traslated by Prof. K.R.Srikanta murthy, Chowkhamba krishna das academy, Varanasi, Chikitsa Sthana -12 chapter, Pg No-383.
4. Vagbhata, Astanga sangraha, Edited & Translated dr.p.srinivas rao, Chowkhamba krishna das academy, Varanasi, Volume-2, Chikitsa Sthana -14 chapter, Pg No-469 to 474.
5. Sarangadharacarya, Sarangadhara Samhitha, Edited & Translated by G .Prabhakar Rao, Madhyamakanda, Pg No- 66-255.
6. Bhava Mishra, Bhavaprakasha Samhitha, Traslated by prof .K.R.Srikanta Murthy, Chowkhamba krishna das academy, Varanasi, Volume- 2, 1st edition madyamakanda- 38 chapter, pg no-483-501.
7. Vangasena samhitha or Chikitsa sara sangraha of Vangasena, Edited & Translated by Dr. Nirmala saxena, Chowkamba sanskrit series office, Varanasi, Chapter- 41, Pg.No-579-586.
8. Kaviraj Shri Govinddas Sen, Bhaisajya ratnavali, English translation and commentary by Dr. G .Prabhakar Rao, Chaukhambha orientalia, Varanasi, First edition 2014, Vol-2, Chapter-13 Pg No -35- 45.
9. Chakradatta (A Treatise on Principles and Practise of Ayurvedic Medicine), Edited & Translated by P.V.Sharma, Chaukhamba Publishers, Varanasi, chapter -35, Pg.No-300-305.
10. Yogaratnakara, Dr.MadhamShetty Suresh Babu, Chowkhamba Sanskrit series office , Varanasi, Uttarardha, volume- 2, First edition, PgNo- 803.