

AYURVEDIC APPROACH TO MANAGEMENT OF MADHUMEHA WSR TO TYPE 2 DIABETES MELLITUS – A SINGLE CASE REPORT

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ABSTRACT

Diabetes mellitus is a group of metabolic diseases characterized by hyperglycaemia resulting from defects in insulin secretion, insulin action, or both. The pathophysiology of type 1 diabetes derives from the autoimmune destruction of insulin-secreting pancreatic β -cells, resulting in insulin deficiency and subsequent hyperglycaemia. Type 1 diabetes accounts for about 10-15% of all diabetics. Type-2 diabetes is characterized by abnormal insulin secretion due to peripheral resistance and accounts for 85-90% of all persons with diabetes. The chronic hyperglycaemia of diabetes is associated with long-term damage, dysfunction, and failure of different organs, especially the eyes, kidneys, nerves, heart, and blood vessels. Such metabolic disorder is considered as *Madhumeha* in Ayurveda based on symptoms. It is a *Vataja Prameha* which results from various *nidanas*. Here the objective was to evaluate the efficacy of Ayurvedic formulation – *Trayushnadi gutika* in *Madhumeha*.

Keywords: *Bala, Dosha, Jwara, Ojas, vyadhikshamatwa, Vikara vighata bhava*

INTRODUCTION

Diabetes mellitus is the condition in which the body does not properly process food for use as energy. Most of the food we eat is turned into glucose, or sugar, for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of our bodies. When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should. This causes sugars to build up in your blood. This is why many people refer to diabetes as "sugar." This may be accompanied by other biochemical disturbances and the presence of progressive diabetic tissue damage with micro & macro

vascular complications¹. This metabolic disorder is considered as *Madhumeha*² in Ayurveda based on symptoms it sub-classified as *Vataja Prameha*³ and it can occur based on *Dosha* predominance⁴.

Acharya charaka has clearly explained the *nidanas* and *Chikitsa*, the disease *Madhumeha*, its definition, etiology, clinical presentations and different modes of treatment are similar with the disease diabetes mellitus. The main symptom predominantly which will be seen in patients as explained by Acharyas are *prabhoothamoothratha* (polyuria), *aavilamoothratha* (Turbidity of urine), *atipipasa* (polydipsia), *kshud- atipravruthi* (polyphagia),

dourbalya (debility), karapada daha (burning sensation on palms and soles).⁵

In parlance with modern treatment, synthetic drugs are prescribed for DMT2 as tablets OHA's⁶ which are having side effects and do not restore the normalcy of the body (homeostasis). Therefore, many efforts are made to identify new OHA drugs from various sources. Thus it's essential to look for Ayurvedic management of diabetes. Even though many researchers have been conducted for the same still it's elusive about the perfect standard protocol of management with efficacious drugs. Here in this study a compound formulation named *Trayushnadi gutika*⁷ is prepared with drugs like *Amalaki*, *vibhitaki*, *haritaki*, *shunti*, *pippali*, *maricha*, *guggulu*, processed in *gokshurakwatha* and are used to make *gutika* which is proven for its *Prameha-hara* properties but needs to be established scientifically with clinical support.

MATERIALS AND METHODS:

Table 1: PROPERTIES OF TRAYUSHNADI GUTIKA

Sl.no	Drug name	Latin name	Rasa	Guna	Veerya	Vipaka	Roghagnatha
1	AMALAKI	Embelica officinalis	LavanaVa rjitaPanch a Rasa	-	Shita	Madhura	Prameha , Netra Roga , Soma Roga, Mutrakrichra
2	HARITKI	Terminalia chebula	Kashaya Pradhan, LavanaVa rjithaPanc ha Rasa	Laghu, Ruksha	Ushna	Madhura	Prameha , Shotha , Klaibhya, Mutrakrichra
3	VIBHITAKI	Terminalia bellerica	Kashaya	Ruksha , Laghu	Ushna	Madhura	Trishna , Ashmari
4	SHUNTI	Zingiberoffic ianale	Katu	Ruksha, Tikshna	Ushna	Madhura	TrishnaNigraha na, Agnimandya, Shola,

A 50 year old, adult female came to SKAMCH &RC - OPD with the chief complaints of *prabhuthamutrata*, *karapada – daha*, *suptata*, *kshudhaathipravruthi*, *Aavilamutrata*. This was diagnosed as the case of Diabetes Mellitus.

Symptoms:

- *Prabhuthamuthratha* (polyuria)
- *Aavilamuthratha* (turbidity of urine)
- *Kshudaathipravruthi* (polyphagia)

Signs:

- Giddiness
- Debility

Instigations:

- FBS
- PPBS
- FUS
- PPUS

MANAGEMENT:

A Compound formulation called *Trayushnadi gutika* was prepared from the following drugs –

- Ref: *Chakaradutta Pramehaadhikar* page no. 216, verse - 52 – 53

5	PIPPALI	Piper longum	Katu	Laghu, Snigdha, Tikshna	Ushna	Madhura	Prameha , Shula , Gulma
6	MARICHA	Piper nigrum	Katu	Laghu, Tikshana	Ushna	Katu	Pramathi, Deepaniya Krimighna
7	GUGGULU	Commiphora ukul	Tikta, Katu	Laghu, Ruksha , Sara	Ushna	Katu	Prameha Lekhana, Sthoulya ,Shotha, Shula
8	GOKSHUR A	Tribulusteres tris	Madhura	Guru , Snigdha	Shita	Madhura	Prameha, Mutrakrichra,K laibhya

• Dose & Duration:

- ✓ Trayushnadi gutika
- ✓ Dose: 2 tabs of 500 mg each BID A/F
- ✓ Mode of administration: orally
- ✓ Duration: 30 days
- ✓ Anupana : Sukoshna jala

Results: Improvement in subjective symptoms and signs are as follows

Complete relief in *Kara- Pada Daha*, & *Supthatha* Marked improvement in *Prabhutha* & *Avila Muthratha Kshudaathipravruithi* got reduced.

DISCUSSION

In view of Ayurveda, indulgence in faulty life style creates a number of diseases where along with the medical interventions; modifications in life style, diet plays important role in managing or reversing the diseases process. *Apathya-nimittajjaprameha* mentioned in the Ayurvedic texts has much similarity to the type-2 diabetes mellitus in terms of its etiology, etiopathogenesis, and presentation of the disease. Thus, the study was planned for the management of this disease through Ayurvedic management. *Madhumeha* is a disease in which the patient voids excessive quantity of urine having concordance with *Madhu* i.e. of *Kashaya*

and *Madhura* taste, *Ruksha* texture and honey like color⁸. In *Madhumeha*, mainly the *Vata* and *Kapha* are predominant though the disease is *Tridoshaj*. The *Vata* may be provoked either directly by its etiological factors or by the *Avarana* of its path by *Kapha*, *Pitta* or other *Dushyas*. So, *Vagbhata* has classified the *Madhumeha* into two categories i.e. *Dhatukshanajanya Madhumeha* and *Avarnajanya Madhumeha*⁹. Type I Diabetes mellitus is nearer to *Dhatukshanajanya Madhumeha* while type II Diabetes mellitus resembles to *Avaranjanya Madhumeha*.

Table 3: INVESTIGATIONS CHART:

SL. NO	BT	AT (After 30 Days)
FBS	169	139
PPBS	256	202
FUS	1.0 %	TRACE
PPUS	1.0 %	1.0 %

In the above study, it was observed that symptoms like *Prabhuthamuthratha*, *Avila muthratha*, *Kshudaathipravruithi*, *Dourbalya*, *Kara pada daha & suptata* was reduced significantly with the trial drug even though there were variations with lab values. Considering the concept of human as a whole

person, - quantification of lab parameters in a non-linear dynamic system like human body are like square plug put in round hole where accuracy is always a query as human is a dynamic structure¹⁰.

Diabetes is a silent pathology which slowly kills the life span of the patient and improper medication or uncontrolled food can cause the death of the person. According to Ayurvedamedodhatu¹¹ is primarily affected in diabetes. So only the medhodhatu should not be decreased which may lead to grave consequences. With that proper care only diabetes can be controlled. The main key for diabetes control is proper medicine with proper exercise and balanced diet

Probable mode of action of Trayushnadi gutika:

The drug Trayushnadi gutika contains drugs like (triphala) Amalaki, vibhitaki, haritaki,(trikatu) shunti, pippali, maricha, guggulu, gokshurakwatha. All the drugs have been documented for its hypoglycaemic activity, anti-oxidants, and have been used individually in diabetic patients. Trikatu with its katu rasa, laghu – tikshnaguna can do the kledashoshana, aamapachan functions, It sushnavirya will clear the srotorodha to remove the avarana and promote anulomana of vyana & prana vata. Tiphala with its Kashaya rasa, laghu – rukshaguna predominantly will perform Vata-Anulomana Karma, removes the obstructive materials from srotas, with the above properties the obstructive Kapha and other materials like kleda have been cleared out from the Srotas.Guggulu having the properties of Katu rasa, Ushnavirya, Ruksha and Laghuguna acts asDeepana. Katu rasa ofGuggulustimulates the functions of the Vyana vata. So the normalized functions of the stomach also help in digestion

of Aama. With all above drug Gokshura acts as rasayana,kapha – medo hara,deepana, pachana.

CONCLUSION

Due to Avarana, aggravated Vayu causes depletion of Vital Dhatu like Oja, Majja, Vasa and affect the normal physiology. Sedentary life style, Lack of exercise, Faulty food habits and improper medications are etiological factors and until it's rectified it will precipitate the disease. Treatment modalities based on the consideration of vitiated Kapha, Meda and Vata having properties like Sleshama-medohara, Pramehaghna and Kapha-Vatahara. The complication of Diabetes mellitus and side effects can be controlled & prevented with the best use of Ayurvedic medicine.

In this study, the trial drug trayushadi gutika has been found effective in Madhumeha with properties like Katu Rasa, Laghu – RukshaGuna, KaphaMeda Hara, Lekahana, Vatanulomana, Rasayana, Ushna Veerya controls the blood sugar levels. Further scope of study is to conduct the trial in a large sample, for longer duration and with adequate Anupana for better standardised scientific study.

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