

## A CASE STUDY ON *MADHUMEHA* W.S.R TO TYPE 2 DIABETES MELLITUS TREATED WITH AYURVEDIC DRUGS

Neha Upadhyay<sup>\*1</sup>, Om Prakash Singh<sup>2</sup> and Sanjay Kumar Tripathi<sup>3</sup>

<sup>1</sup>P.G Scholar, Department of Post Graduate Studies in Kayachikitsa, Rishikul Campus, Uttarakhand Ayurved University, Haridwar, Uttarakhand.

<sup>2</sup>Professor and Head of Department, Department of Post Graduate Studies in Kayachikitsa, Rishikul Campus, Uttarakhand Ayurved University, Haridwar, Uttarakhand.

<sup>3</sup>Professor, Department of Post Graduate Studies in Kayachikitsa, Rishikul Campus, Uttarakhand Ayurved University, Haridwar, Uttarakhand.

Article Received on  
01 June 2023,

Revised on 22 June 2023,  
Accepted on 12 July 2023

DOI: 10.20959/wjpr202312-29019

### \*Corresponding Author

**Dr. Neha Upadhyay**

P.G Scholar, Department of  
Post Graduate Studies in  
Kayachikitsa, Rishikul  
Campus, Uttarakhand  
Ayurved University,  
Haridwar, Uttarakhand.

### ABSTRACT

Lifestyle represents people's way of life, showing the full spectrum of events, daily attitudes from sunrise to sunset. Dramatic changes in peoples' lives, mostly due to sedentary lifestyles that can contribute to many disorders including *Madhumeha*. As we all know, *Madhumeha* is a disease in which aetiology, signs and symptoms coincide with current Diabetes mellitus ideas. The ayurvedic classics describes a comprehensive concept of the pathogenesis of diabetes mellitus marked with depletion of agni, disturbance in fat (meda) metabolism and lowering of immune system (ojas). Agni deepana dravya with enhancement in ojas and correction of medas seems to be the principle trio of cure approach in this along with modified diet and lifestyle. The present study deals with a male of age 60 year old male patient visited

O.P.D of kayachikitsa at rishikul campus haridwar on 15 oct/2022 with complains of increased frequency of urination [DAY-(6-7 TIMES) in NIGHT(4-5 times)], Generalised weakness, increased sweating, dryness of mouth, increased thirst, constipation, etc. the patient was put under ayurvedic treatment with bougainvillea-annona patra Ghana vati for 3 consecutive months. Blood sugar fasting, blood sugar post-prandial, urine sugar, HbA1c was done after complete duration of treatment. Blood sugar fasting and post prandial was successfully dropped from 171.6 mg/dl to 140mg/dl and PP with 322.4mg/dl to 200.2mg/dl.

**Aims of Study**-The present study was carried out with an objective to compare the efficacy

of *Bougainvillea-Annona Patra Ghana Vati* in the management of *Madhumeha* w.s.r. to type 2 Diabetes Mellitus.

## INTRODUCTION

Mellitus is a group of metabolic diseases characterized by hyperglycemia which occur due to reduced insulin secretion, decreased glucose utilization and increased glucose production.

India has been projecting by W.H.O as the country with the fastest growing population of diabetic patients. It is estimated that between 1995 to 2025 diabetic patients in India will increase by 95%. The problem with diabetes mellitus is that, it is very difficult to diagnose in the early stages. The type 2 DM accounts for 85-95% of all diabetes in high income countries and may account for even higher in low and middle income countries. Around 382 million people worldwide are estimated to have DM.

Ancient *Ayurvedic Acharyas* define *Madhumeha* as excessive, abnormal micturition, whereas diabetes mellitus (DM) is defined as a state of hyperglycemia. Like *Prameha*, Diabetes Mellitus is also categorized into two types;-Type I DM or insulin dependent DM and Type II DM or non-insulin dependent DM. Similar etiology and clinical manifestations correlate Type I DM to *Sahaja Prameha* and Type II DM to *Apathyanimittaja Prameha*. Both Type I DM and *Sahaja Prameha* are caused by genetic factors and affected persons are lean, weak, emaciated and need to be treated with nourishing diet (*santarpana*). Type II DM and *Apathyanimittaja Prameha* are caused by excessive nutrition and sedentary lifestyle and such persons are afflicted with obesity (*sthaulya*), polyphagia, sleepiness, laziness, and these symptoms are clinically correlated with Diabetes Mellitus type-2.

## MATERIALS AND METHODS

**Table 1:** the detail of the drug along with part used are given in below table.

S.No	CONTENT OF DRUG	PART USED
1.	BOUGAINVILLEA LEAF EXTRACT	50%
2.	SITAPHALA LEAF EXTRACT	50%

### Method

**A. CENTRE OF STUDY:** Rishikul Campus, UAU, Haridwar

**B. Plan of treatment:** the treatment was done on OPD basis, *Bougainvillea-Annona patra Ghana vati* 500mg /BD was prescribed along with the Diet chart of madhumeha. the patient was observed after every 1 month for 3 month, the changes in the subjective

criteria (symptom) along with objective criteria (Reports of blood sugar fasting, postprandial and HbA1c) were done.

### C. Case reports

60 year old male patient visited O.P.D of kayachikitsa at rishikul campus haridwar on 15 oct/2022 with complains of increased frequency of urination[DAY-(6-7 TIMES) in NIGHT(4-5 times)], Generalised weakness, increased sweating, dryness of mouth, increased thirst, constipation.

### History of present illness

The patient was diagnosed as *Madhumeha* (Type II DM) 4-5 years back. Patient was on oral hypoglycemic drugs. Apart from this there was no specific past history of HTN, TB, Thyroid disorder etc.

### General Examination

At the first visit to the OPD following examination were done-

<b>General condition-</b> Avg	<b>Pallor-</b> absent
<b>Height-</b> 5.3	<b>Icterus-</b> absent
<b>Weight-</b> 71.5kg	<b>Cyanosis-</b> absent
<b>Temperature-</b> 98.4 f <sup>0</sup>	<b>Clubbing-</b> absent
<b>Pulse -</b> 86/min	<b>Oedema-</b> absent
<b>B.P-</b> 140/90 mm/Hg	<b>JVP-</b> not raised
<b>Respiratory rate -</b> 18/min	<b>Lymphadenitis -</b> absent
<b>Hepato-Jugular reflex -</b> not raised	

### Clinical Examination

#### ASHTAVIDHA PARIKSHA

**Nadi-** 86/min, Regular

**Mala-** constipation (alternate bowel habit with hard stool)

**Mutra-** 6-7 time a day and 4-5 times at night, pale yellow in colour and odourless

**Jihva-** Malavrit (Coated)

**Shabda-** Spashta

**Sparsha-** Snigdha, Anushana sheeta

**Drika-** Blurring of vision

**Akriti-** Madhayama

**DASHVIDHA PARIKSHA****Prakriti-** vata-kaphaja**Vikriti** – dosha dushya nimitta (mainly vata doha and meda dhatu)**Saara-** madhyama**Samhanana-** madhyama**Ahara shakti:-** Abhyaharana Shakti : tikshana**Jaranashakti** : madhyama**Vyayama** – Madhyama**Vaya** – Vridhaavastha**Investigation**

FBS-

BSPP-

KFT

URINE-R

-M

**OBSERVATION AND RESULT**

The patient was observed for 3 consecutive month and on each month subjective criteria and objective criteria were assess and after 3 month HbA1C was repeated.

S.NO	SYMPTOMS	BEFORE TREATMENT	AFTER 30 DAYS	AFTER 60 DAYS	AFTER 90 DAYS
1.	<i>Prabhuta mutrata</i>	++	++	+	+
2.	<i>Avila mutrata</i>	+	+	—	—
3.	<i>Ati-kshudha</i>	+	—	—	—
4.	<i>Pipasa-adhikya</i>	+	—	—	—
5.	<i>Karpada-daha</i>	+	—	—	—
6.	<i>Daurbalaya</i>	++	+	+	+

**OBJECTIVE CRITERIA**

S.NO	INVESTIGATION	BEFORE TREATMENT	AFTER 90 DAYS
1.	BSF	171.6 mg/dl	140.2mg/dl
2.	BSPP	322.4 mg/dl	200.2 mg/dl
3.	URINE SUGAR	+++	+
4.	B.M.I	30kg/m <sup>2</sup>	30kg/m <sup>2</sup>
5.	HbA1c	7.8%	5.9%

➤ **DIET CHART FOR DIABETES (*MADHUMEHA*)**

Time	Aahara
7 am	1 cup of Tea(without sugar) or 1 to 2 glass of luke warm water
8am (breakfast)	1 bowl of Daliya with 100ml of milk or 1bowl of Sabji with 2 chapati
11am	1 bowl of Fruits- Apple or Aamla 1 glass(100 ml) of Juice- Karela juice etc
1pm (lunch)	2 Chapatti + 1 bowl of Puranan chawal+1 bowl of Sabji + 1 bowl of Daal + 1 plate of Salad
4pm	50 to 60 gm of Roasted channa or Murmura chatt
9pm (dinner)	1 bowl of Soup + 1 bowl of Sabji + 2 Chapatti + 1 bowl of Daal + 1 plate of Salad
10pm	1 glass(100ml) of Milk (without milkcream)

**DISCUSSION**

*Madhumeha* has been described as *anushangi* by *Acharya Charaka*. In *Brihat Trayi* it is included under *Ashthamahagada*. the Diabetes Mellitus is a long term metabolic disorder with multiple etiological factors, variable clinical manifestations, progression, and number of complication.

People are turning towards *Ayurveda* with a hope to find comprehensive solution for this condition. *Ayurveda* has a long tradition of treating diabetic patients and has its own strengths over the conventional system of Biomedicine.

According to *Ayurveda* “*swastha* or the healthy person is an individual who is in a state in which the *Doshas*, *Agni* And *Dhatus* are all in equilibrium, the excretion of *Mala* (the body wastes) is regular multiple factors are involved in the pathogenesis of this condition. First it is *Kapha* which increases in quantity due to various causes and also gets liquefied (*Bahu Dravah Shleshma*), followed by *Shaithilya* or *Shithilikarana* (looseness) of body thus preparing a base for the initiation of pathological events i.e. body’s susceptibility for the disease. Next the association of *Kapha* occurs with excess (*Bahu*) and unbound/unutilized (*Abaddha*) *Meda*, *Mamsa* and *Kleda* leading to various presenting features of the disease.

Although *Prameha* is a *Tridoshaja* disease (vitiation of all three doshas, but initially the *Apathyanimitaja Prameha* is a *Kapha* predominant stage. In later stages, however, other *Doshas* may get involved in different proportions and produce *Kaphaja*, *Pittaja*, *Vataja* and *Dwandaja prameha*. *Apathyanimitaja pramehi* are usually comparatively *Sthoola* and have

*Kapha* predominance initially, however if disease is not controlled either by diet or/and drugs, the vitiation of *Pitta* followed by vitiation of *Vata* occurs. Therefore, *Kaphaja*, *Pittaja* and *Vataja Prameha* are three different stages of the same disease with the former being the early stage and later the late stage with the stage of *Pitta* predominance in between.

In mentioned Drug *Bougainvillea-Annona Patra Ghana Vati* the extract of its leaves contains pinitol, which serves as hypoglycemic agent and exhibits insulin like effect. Glucosidase inhibitory activity against murine pancreatic and intestinal glucosidase is suggested to be one of the important underlying mechanisms of antidiabetogenic activity.

*Chedana, Lekhana, Medohara, Mootral, Shothhar, Balya, Dahaprashamna, Pramehaghna, Medoroga, Deepana* properties.

## CONCLUSION

After reviewing the observation and result it may be concluded that *Bougainvillea-Annona Patra Ghana Vati* 500mg BD with luke warm water along with diet chart for 3 month is good management for *Madhumeha* (type-2 DM) and no such adverse effect were noticed during the treatment schedule.

## REFERENCES

1. Diabetes DOF. Diagnosis and classification of diabetes mellitus. Diabetes Care., 2009; 32. doi:10.2337/dc09-S062.
2. <http://www.who.int/diabetes/globalreport/en/> Retrieved March 20, 2018.
3. Saini A. Physicians of ancient India. J Fam Med Prim Care., 2016; 5(2): 254. doi:10.4103/2249-4863.192322.
4. Sushruta. Sushruta Samhita Sutrasthana with Nibandha Samgraha commentary by Dalhana. edited by Yadavji Trikamaji. Chaukhambha Orientalia, Varanasi, reprint, 2009.
5. Satyavati G V. The Role of Ayurveda as Contemporary Medical Science and Therapeutic System. India Int Cent Q., 1991; 18(2/3): 71-82.
6. Agnivesha. Charaka Samhita Sutrasthana revised by Charaka & Dridhabala with Ayurveda Deepika commentary by Chakrapanidatta. edited by Yadavaji Trikamaji. Chaukhambha Prakashan, Varanasi, reprint, 2007.
7. Sushruta. Sushruta Samhita Chikitsasthana with Nibandha Samgraha commentary by Dalhana. edited by Yadavji Trikamaji. Chaukhambha Orientalia, Varanasi, reprint, 2009.

8. Agnivesha. Charaka Samhita Chikitsasthana revised by Charaka & Dridhabala with Ayurveda Deepika commentary by Chakrapanidatta. edited by Yadavaji Trikamji. Chaukhambha Prakashan, Varanasi, reprint, 2007.
9. Agnivesha. Charaka Samhita Nidanasthana revised by Charaka & Dridhabala with Ayurveda Deepika commentary by Chakrapanidatta. edited by Yadavaji Trikamji.