provided by Journal of Ayurveda and Integrated Medical Sciences (JAIMS



ISSN 2456-3110 Vol 2 · Issue 2 Mar-Apr 2017

# Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in





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ISSN: 2456-3110 **CASE REPORT** Mar-Apr 2017

## Role of Rhizome Powder of Turmeric in the management of Madhumeha w.s.r. to Diabetes Mellitus - A Case Study

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### ABSTRACT

Diabetes mellitus is a group of metabolic disorders characterized by chronic hyperglycemia associated with disturbances of carbohydrates, fat, protein metabolism due to absolute or relative deficiency in insulin secretion, that metabolic disorder is considered as the Madhumeha in Ayurveda based on their symptoms. It is one of the types of Vataja Prameha. It results from various etiological factors. Here objective was to evaluate the efficacy of Ayurveda treatment in management of Madhumeha. A 35years old male came to SDM College of Ayurveda Hospital Kayachikitsa special OPD with complaint of Prabhoothamutra, Karapada Daha, Avila Mutrata and Kshudaathi Pravrthi. Examination, investigations and history leads to diabetes mellitus. So patient was treated with Haridra Choorna, Pathya, Apathya and Yogasananas. Ayurveda treatment has effective results in the management of Madhumeha by single drug administration orally.

Key words: Curcuma longa Linn, Diabetes mellitus, Haridra, Madhumeha.

#### **INTRODUCTION**

Diabetes mellitus is a major public health problem in the developed as well as developing countries. It is ranked seventh among the leading causes of death, and third when all its fatal complications are taken into account.[1] The disease Madhumeha, its definition, etiology, clinical features and principles of treatment appear to be similar with the disease "Diabetes mellitus", which is considered as "Ice Berg" disease in the present era. [2] In conventional therapy,

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Submission Date: 03/03/2017 Accepted Date: 04/04/2017

Access this article online Quick Response Code Website: www.jaims.in DOI: 10.21760/jaims.v2i2.7737 Type I diabetes is treated with exogenous insulin and with oral hypoglycemic (sulphonylureas, biguanides etc).[3] Though different types of oral hypoglycemic agents are available along with insulin for the treatment of diabetes, there is an increased demand by patients to use natural products with antidiabetic activity.<sup>[4]</sup> The main symptom which was in the patient of diabetes which was mentioned by Acharyas are Prabootha Mootratha (micturition during day time), Avila Mootratha (turbidity of urine), Kshudhaathi Pravrithi (increase of Dhourbhalya (debility), Karapada Daha (burning senstation inpalms and soles.[5] The present case study, treatment with Haridra Choorna is conducted to confirm its efficacy, as it is given as Madhumehahara effect in many of the classical texts.

#### **MATERIALS AND METHODS**

#### **Selection of patient**

A newly diagnosed male patient aged about 35 years visited SDM college of Ayurveda Hospital Kayachikitsa special OPD with following presenting with complaints ISSN: 2456-3110

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of *Prabhutha Mutra* day and night, *Avilamutrata*, *Karapada Daha*, *Kshudhadhikyata* and *Dourbalya*. This diagnosis was done as diabetes mellitus.

#### **Symptoms**

- 1. Prabhuthamutrata
- 2. Kshudhadhikyata
- 3. Avila mutratha
- 4. Pipasadhikyata
- 5. KarapadaDaha
- 6. Dourbalya

#### Investigation

- 1. FBS
- 2. FUS
- 3. PPBS
- 4. PPUS

Single drug which is having Madhumehahara action

Drug: Rhizome powder of Haridra

Dose: 3g. two times a day

Mode of administration: orally

Duration of treatment: 30 days

#### **RESULTS**

Table 1: Effect Of Rhizome Powder Of *Curcuma Longa* Linn. for subjective parameters.

N o	Subjective parameter	Before treatmen t (Scoring)	Review after 2 weeks (Scoring )	Review after 4 weeks (Scoring
1	Prabhuta Mootrata	2	1	0
2	Avila Mootrata	1	1	0
3	Pipasadhikyata	0	0	0
4	Kshudhadhikyat	1	0	0

	а			
5	Karapada Daha	2	1	0
6	Dourbalya	1	1	1
7	Angamarda	2	1	0

Table 2: Effect of Rhizome Powder of Curcuma Longa Linn. for objective parameters.

No	Objective parameter	Before treatment (Scoring)	Review after 2 weeks (Scoring)	Review after 4 weeks (Scoring)
1	F.B.S	136.2	124.5	116.9
2	F.U.S	Trace	Absent	Absent
3	P.P.B.S	176.1	170.1	152.6
4	P.P.U.S	1.0%	1.0%	Trace

#### **DISCUSSION**

#### **Effect of therapy on subjective parameters**

Prabhutmootrata and Avilmootrata between day 1 and day 30 was significantly reduced. Other subjective parameters like Kshudhadhikyata, Karapada Daha and Angamarda was also significantly reduced. Only in Dourbalya no change is seen.

#### Effect of therapy on objective parameters

FBS reduced significantly with the p value at 0.03 after a period of two months. FUS reduced significantly with the p value at 0.01 after a period of two months. PPBS reduced significantly with the p value at 0.19 after a period of two months. PPUS reduced significantly with the p value at 0.02 after a period of two months.

Diabetes mellitus is a major public health problem in the developed as well as developing countries. It is ranked seventh among the leading causes of death and third when all its fatal complications are taken into account. In the present study, treatment with Haridra Choorna produced significant hypoglycemia. **ISSN: 2456-3110 CASE REPORT** Mar-Apr 2017

Haridra possess Katu Tikta, Rasa, Laghu Rooksha Guna, Usna Virya and Katu Vipaka. [6] It mainly acts as Pitta-Kapha Shamaka, Meda, Kleda Upashoshana. It has Usna Virya which is mainly acts as a Vatahara. It is having opposite qualities to that of Kapha and Medas. This Tridosha Shamaka property of the drugs helps to correct the Dhatu Dushti and Sroto Dushti leading to their normal functioning. Hence it acts as Mehahara. Haridra Choorna has showed significant improvement in the symptoms of Madhumeha and blood sugar. Curcuma Longa Linn. is contain curcuminoids, known glycosides, terpenoids and flavonoids.<sup>[7]</sup> Maximal inhibition of the enzyme Human Pancreatic Amylase (HPA) was obtained with Curcuma Longa isopropanol extract and acetone extract. This inhibitory action on HPA causes reduction in starch hydrolysis leading to lowered glucose levels.[8]

#### **CONCLUSION**

Madhumeha known as silent killer needs to be treated as early as possible to stop onset of complication. Single drug treatment like Haridra Churna can prove to be boon to the wide population suffering from Diabetes mellitus comprising of Pathyakara Aahara Vihara followed with regular practice of Yogasanas. This case study proves that Haridra Choorna is an efficient as well as an ideal drug for its potent Madhumehahara (Anti hyperglycemic) effect.

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**How to cite this article:** Vasavda Krup, Hegde Prakash L, Harini A. Role of Rhizome Powder of Turmeric in the management of Madhumeha w.s.r. to Diabetes Mellitus - A Case Study. J Ayurveda Integr Med Sci 2017;2:242-244.

http://dx.doi.org/10.21760/jaims.v2i2.7737