



Remedial Rasayana in Combating Fasting Blood Sugar W.S.R. to Tuvaraka Rasayana – Case Series

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ABSTRACT

Introduction: Diabetes Mellitus is one of the endocrine disorder as well as life style disorder with prevalence rate of 11.8% in India. As per *Ayurveda*, Diabetes Mellitus is akin with Prameha which comes under *Yapya Vyadhi*. *Shodhana*, *Shamana* and *Rasayana* are the line of treatment of *Prameha Vyadhi*. *Tuvaraka Rasayana* is one of the *Pramehahara Rasayana* explained in literature as *Naimittika Rasayana*.

Methods: *Acharya sushruta* has explained *Tuvaraka Rasayana* as a *shodhana* type of management in *Madhumeha*, which acts as *mehapaha*. *Tuvaraka taila* was administered in 5 patients with dose of 8ml on empty stomach for 5 days after 3 days of *Nitya Virechana* with *Mishraka Sneha*. Fasting Blood sugar was assessed before and after the treatment.

Results: Fasting blood sugar level decreased after the treatment. The values of FBS of 5 patients are: before treatment 334 mg/dl, 202mg/dl, 171mg/dl, 162mg/dl and 290mg/dl, after treatment they were 302mg/dl, 115mg/dl, 129mg/dl, 60mg/dl and 116 mg/dl respectively. The mean at before treatment was 231.8 and after treatment were 144.4.

Discussion: *Tuvaraka taila* is *Ubhayatobhagara Shodhana Dravya* and *Pramehahara Rasayana*. Administration of 8ml *Tuvaraka taila* induces 1 *Vega* of *Vamana* and 2 or 3 *Vega* of *Virechana*. By the *Ubhayatohara Shodhana*, there is decrease in *Kapha* and *Meda* which in turn reduces the Blood Sugar level in Diabetes Mellitus patient

Keywords: *Tuvaraka Rasayana*, Fasting Blood Sugar, *Vamana*, *Virechana*.

INTRODUCTION

Ayurveda is a science of life. The main aim of *Ayurveda* is to maintain *Dharma* (Virtuous acts), *Artha* (Wealth), *Kama* (Desire) and *Moksha* (Salvation). These are considered as *Purushartha*

Chatustaya which are essential for health.¹ The objective of *Ayurveda* is to maintain the health of an individual and curing the disease.²

Ayurveda is a foremost system of Medicine in the Universe. In the present scenario the life style disorders are the world wide burning problem. Diabetes Mellitus is becomes the fastest considerable disease in World wide. India has being estimated with fastest growing population of Diabetes due to improper life styles.

The World Health Organization estimated the global prevalence of Diabetes among adults over 18 years of age as 8.5% in 2014. As per the National Diabetes and Diabetic Retinopathy Survey report released by the Health and Family Welfare Ministry prevalence of diabetes in India in the last four years is found to be 11.8%.³

Prameha is a disease of *Mutravaha Sroto Vikara*. It can be defined on the basis of its common signs and symptoms. They are frequent and copious Micturition along with turbidity is known as *Prameha*.⁴ *Madhumeha* is a clinical entity in which the patient voids *Mutra*, having the similar qualities of *Madhu* like its colour, taste, smell or appearance.⁵

Below enumerated factors are *Samanya nidanas* for *prameha*⁶

- a) *Asyasukham*- interest in sedentary habits.
- b) *Swapnasukham*- pleasure of sleep.
- c) *Dadhini*- over indulgence of various preparations of curds.
- d) *Gramya, audaka, anoopa rasa*- soups of meat of domesticated and aquatic animals belonging to marshy land.
- e) *Payansi*- various milk preparations.
- f) *Navannapanam*- freshly harvested food articles, freshly prepared drinks.
- g) *Guda vaikritam*- various preparations of jaggary.

All these factors are responsible for the aggravation of *Kapha* and *Meda* in *Shareera* in turn cause the *Prameha*.

Shodhana, Shamana and *Rasayana* are the line of treatment of *Prameha Vyadhi*.⁷ Different *Prameha hara Rasayana* are explained in literatures. Out of which one is *Tuvaraka Rasayana*⁸. It is one of the *Ubhayatobhagahara dravya* acts as *Shodhana* and explained as *Naimittika Rasayana*⁹ in literatures.

METHOD

The study was carried on 5 patients; the patients were diagnosed as Diabetes Mellitus with increased Fasting Blood Sugar Level. The FBS values were taken before the treatment and after the treatment. Patients were first subjected for *Kosta Shuddhi* in early morning with *Mishraka Sneha*¹⁰ for 3 days. Later the patients were administered with 8 ml of *Tuvaraka Rasayana (Tuvaraka taila)* in every day morning at 6.30 for 5 days. After about 2 hours after intake of *Tuvaraka Taila*, they were advised with a particular diet *Ganji* (Rice Gruel), *Krishara* (Kichidi), *Mudga Yusha* (Green gram Soup) during this treatment period. After treatment once again the FBS values were checked and observed for the values of FBS.

OBSERVATION AND RESULT

After administration of *Tuvaraka taila* patient started with *Vamana* and *Virechana* after half an hour. For the dose of 8ml, patients were had in an average 1 *Vega* of *Vamana* and 2 to 3 *Vega* of *Virechana*. The FBS values of 5 patients before treatment 334 mg/dl, 202mg/dl, 171mg/dl, 162mg/dl and 290mg/dl, after treatment they were 302mg/dl, 115mg/dl, 129mg/dl, 60mg/dl and 116 mg/dl respectively. The mean at before treatment was 231.8 and after treatment were 144.4.

SL No	FBS	
	BT	AT
1	334 mg/dl	302 mg/dl
2	202 mg/dl	115 mg/dl
3	171 mg/dl	129 mg/dl
4	162 mg/dl	60 mg/dl
5	290 mg/dl	116 mg/dl
Mean	231.8	144.4

DISCUSSION

The *Tuvaraka Rasayana sevana* in Prameha is with the motto of *Shodhana and Rasayana*. *Tuvaraka* as has the quality of *Ushna* and *Teekshna* which acts upon *Meda* and *Kapha* and do the *Medohara* and *Kaphahara* which in turn do *Pramehahara*.¹¹ Literatures explains that *Tuvaraka Rasayana* should be given on every *Chaturtha Bhaktantarita* for 5 times I .e. on every fourth meal it has to be given. It can be understood that, *Tuvaraka Rasayana*

should be given on alternate day. But, *Acharya Vagbhata* said *Tuvaraka Rasayana* should be given for 5 days. With the reference of *Vagbhata* the study was followed. As the *Acharya Shushruta* and *Vagbhata* was explained that, the dose of *Tuvaraka Taila for Rasayana* is *Panitala Pramanam* i.e. *Karsha pramana* approximately 12 ml. We gave 12 ml *Tuvaraka Rasayana* to the patient by assessing *Dashavidha Pariksha Bhavas*. That person was attained 3 *Vegas* of *Vamana*, and 5 *Vegas* of *Virchana* and shows the symptom of dehydration. After that we reduce the dose to 8ml. On the basis of *Dashavidha Pariksha Bhavas* the remaining patients were administered with 8 ml of *Tuvaraka Rasayana*. They showed 1 *Vamana Vega* and 2-3 *VirechanaVega*.

As the *Tuvaraka* is *Ubhayatobhagahara shodhaka dravya*, it worked on *Samprapti Vighatana*, where it has removed the *Vikrita Kapha* and *Meda* simultaneously. *Vamana* removed the excess *Kapha* and *Virechana* was removed excess *Meda*. With this the drastic fall in FBS levels were noticed immediately after *Tuvaraka Rasayana Shodhana*. The *mishraka Sneha* contains *Trivrith, Triphala, Danti, Dashamoola, Sarpi* (Ghee), *Eranda Taila, Ksheera* (Milk) which will acts as *Kosta shodhaka* that is why it has been given prior to the *pradhana shodhana*.

Tuvaraka is *Katu, Tikta, Kashaya Rasa Pradhana, Snigdha* and *Tikshna Guna, Ushna Virya* and *Katu Vipaka* as it is *Ubhayatobhagahara Shodhaka* it acts on *Kapha* and *Meda* simultaneously. *Tuvaraka* contains *Hydnocarpin, Luteolin* active component which maintains Fasting Blood Glucose in normal levels and thus prevent lipolysis. This also helps to control the release of sugar in urine. This helps in maintaining the triglyceride and total cholesterol levels in near normal limits and thus prevent the onset of *Diabetic Cardiomyopathy*.¹² *Luteolin* is a potential flavonoid with multiple benefits and had multiple functions that collectively promote *luteolin* as a remarkable antidiabetic agent. *Luteolin* is considered as a safe antioxidant. The generation of free radicals followed by oxidative injury to the islet cells of pancreas cause *Diabetes*. *Luteolin* can prevent the generation of *Reactive Oxygen Species (ROS)* by inhibiting the enzymes that generate *ROS*, can scavenge *ROS* and can protect the components of other antioxidant systems.¹³

CONCLUSION

Ayurveda gives prime importance to prevention of the diseases. The faulty life styles and food habits are landing in to non communicable diseases. One such disease is *Diabetes Mellitus*, where the *Blood Glucose* level is raised due to *insulin insufficiency*. In *prameha/ madhumeha* the *Kapha Dosha Dusti* takes place primly later *Pitta* and *Vata* gets affected.

Impairment of *Tridosha* will leads to involvement of *Dasha Dushya*. Rasa, Shonita, Mamsa, Medad, Majja, Shukra, ShariraKleda, Vasaa, Lasika along with Ojus are get liquefied and reaches into Basti Pradesha which in turn leads to Prabhuta Avila Mutrata. So we have to protect Ojus, Sapta Dhatu, Tridosha and Bala which are involved in the manifestation of Prameha. It is possible with the help of Shamana, Shodhana and Rasayana Chikitsa. As Tuvaraka Rasayana is Naimittika Rasayana related to Prameha; so helps in controlling Fasting Blood Sugar in turn Prameha Vyadhi.

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