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A REVIEW- EFFECT OF MUSTADI KWATH IN MADHUMEHA

Geetika Arya[1]*, Punita Pandey[2] and Priyaranjan Tewari[3]

[1]P.G Scholar, Department of Post Graduate Studies in Kayachikitsa, Gurukul Campus, Uttrakhand Ayurved University, Haridwar.

[2]Professor, Department of Post Graduate Studies in Kayachikitsa, Gurukul Campus, Uttrakhand Ayurved University, Haridwar.

[3]Associate Professor, Department of Post Graduate Studies in Kayachikitsa, Gurukul Campus, Uttrakhand Ayurved University, Haridwar.

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***Corresponding Author**
Dr. Geetika Arya
P.G Scholar, Department of Post Graduate Studies in Kayachikitsa, Gurukul Campus, Uttrakhand Ayurved University, Haridwar.

ABSTRACT

Diabetes is one of the major lifestyle disorders. It is world –wide in distribution and the incidence of both types of diabetes mellitus, is rising. Almost 98% of diabetes population in India constitutes of type 2 diabetes mellitus in which prevalence is about 12% to 19% in urban areas and 4 % to 9% in rural areas. In spite of many drugs available treating diabetes mellitus from roots remain always a challenge. So, there is need for a new effective and safe drugs. Ayurveda is the traditional system of Indian medicine which aims to promote and maintain balance in order to prevent disease or cure disease. *Ayurvedic* medicine '*mustadi kwath'* effect in blood sugar level fasting and postprandial.

KEYWORDS:- Diabetes mellitus, *Madhumeha, Prameha, Mustadi Kwath.*

INTRODUCTION

Diabetes mellitus is a clinical syndrome characterized by hyperglycaemia due to absolute or relative deficiency of insulin. Lack of insulin affects the metabolism of carbohydrates, protein and fat, and causes a significant disturbance of water and electrolytes homeostasis. Death may result from acute metabolic decompensation while long- standing metabolic derangement is frequently associated with permanent and irreversible functional and structural changes in the body, with those of the vascular system being particularly

susceptible.[1] Although the incidences of disease is rises, however, the prevalence of both varies considerably.

In different part of the world and this is probably due to differences in genetics and environmental factors.

The cilincal features of diabetes mellitus like excessive urination and turbidity in urine are similar to that of *Madhumeha* of *Ayurveda* i.e. *prabhoota* and *Avila mutrata*. It is one of the disease which has been given prime importance in Ayurveda literature as it is included in *mahagadas.*[2] It is most common metabolic disorder encountered in clinical practice. *Madhumeha* is explained as one of 20 types of *Prameha* described in Ayurveda.[3] *Madhumeha* is the disease in which the excretion is having quality similar to madhu in its colour, smell, taste &consistency along with sweetness of whole body. *Mustadi kwath* mentioned in *Bhaishajya ratnavali* are having *Tikta and Kashaya* are *Pradhan rasa* with *Pramehaghna* property. These properties of *Mustadi kwath* are potent enough to do *Samprapti vighatana* of this disease.

Content of *mustadi kwath*[4]

Name of drug	Botanical name	Family	Part	Part used
Musta	Cyperus rotundus	Cyperacea	1	Root
Hritki	Terminalia chebula	Combretaceae	1	Fruit
Bibhitak	Terminalia bellerica	Combretaceae	1	Fruit
Amalki	Emblica officinalis	Euphorbiaceae	1	Fruit
Haridra	Curcuma longa	Zingiberaceae	1	Stem
Devdaru	Cedrus deodara	Pinaceae	1	Bark
Indryana	Citrullus colocynthis	Cucurbitaceae	1	Root
Murva	Marsdenia tenacissima	Asclpedicaceae	1	Root
Lodhra	Symplocos racemosa	Symploceae	1	Bark

Properties of contents

Drug	Rasa	Guna	Virya	Vipaka	Dosha Karma	Aushad Karma	Pharmacological Action
Musta	Tikta Katu kashya	Laghu ruksha	sheeta	katu	Kaphapitta Shamak	Deepana Panchan shothhar	Anti-diabetic Anti-, hyperlipidemic And anti-oxidant
Haritaki	Panchras Except lavana rasa	laghu ruksha	sheeta	Madhur	Tridosh Shamak Especially vatashamak	Srotah-shodhak rasayana	Heptaprotector, anti-oxidant,anti-diabetic
Bibhitaki	Kashya rasa	Laghu ruksha	ushna	Madhur	Tridosh Shamak Especially kaphashamak	Trishna nigrahana, rechana	Immune-modulator.anti-oxidant
Haridra	Tikta Katu kashya	laghu, ruksh	Ushna	katu	Vata-kaphashamak	Prameha hara lekhana	Anti-diabetic, anti-oxidant
Amalki	Panchras except lavan rasa	Guru Ruksha sheeta	sheeta	madhur	Tridosh Shamak especially pittashamak	Deepana, mutrala.rasayana a'annulomana	Anti-diabetic, Anti-oxidant,hypolipidemic
Devdaru	Tikta Katu kashya	Laghu ruksha	ushna	katu	Kapha-vata shamak	Kaphnisharak, pramehgna	Anti-diabetic. anti-inflammatory
Murva	Tikta kashya	Guru. ruksha	ushna	katu	tridoshhar	Pramehgna.annulomana	Anti-diabetic, anti-oxidant
Indravaruni	Tikta	Laghu Ruksha tikshana	ushna	katu	Kapha-pitta hara	Kaphanisharak, pramehagna	Hypoglycemic and free radical scavenging activity
Lodhra	kashya	Laghu ruksha	sheeta	katu	Kapha-pitta shamak	Kaphgna, sothhara	Hypolipidemic, anti-oxidant

DISCUSSION

Probable mode of action of *mustadi kwath*

All the content taken in equal parts.

Musta – it is *tikta, katu, kashya* in *rasa, katu* in *vipaka, sheeta* in *virya* which might correct the vitiation of pitta in this way, acting on *kapha –pitta*.[5] Provide relief in madhumeha disease. Also it is diuretic in nature. The alcoholic and aqueous extracts of the tubers posses lipolytic action and reduces obesity by releasing enhanced concentrations of biogenic amines from terminals of the brain which suppress the appetite centre. Isocyperol is said to play important role in lipid metabolism.

Haritik has *premehghna* properties such as lavanrahit panchras, ushna virya, laghu, ruksha in guna as Prameha is a kaphapradhan tridoshaj vyadi. According to ayurvedic pharmacopoeia of India the use of powered of mature fruits in polyuria. It has hypolipidemic, immunemodulatory properties.[6]

Triphala have mild purgative effect which causes annulomana of vayu bring an end to the vata pradhana samprapti.

Haridra are known to act on medo dhatus and allied dhatus. It has anti diabetic, hepatoprotective, anti-inflammatory, hypolipidemic action.[7]

Devdaru, triphala, musta bring down the augumentation of digestive fire leading to proper formation of the rasadi seven dhatus Musta, triphala also digest aamdosha.

In this way, these drugs relieve the body excess of kapha, meda and protect the body from further injury due to disease.

- The anti- hyperglycemic function of E. officinalis Gaertn, T. bellirica (Gaertn) and C. longa L may be attributed to their antioxidant potential and reduction in inflammation
- Pharmacological studies have revealed that C. rotundus and S. racemosa exhibit alpha –amylase and alpha –glucosidase inhibitory effects thus are effective antihyperglycemic herbs.
- Earlier preclinical study confirms that treatment with T. chebula Retz causes amplification of the expression of GLUT gene mRNA and increases adiponectin secretion
- It has been shown that C. colocynthis(L) Schrad. Stimulate the release of insulin from beta cell. Besides, C. deodara(Roxb.) G. Don. is able to influence the cellular regeneration os islet of langerhans in pancreas and restore its normal size.

Mode of action on basis of herbal ingredients of *mustadi kwath* formulation[8]

The mechanism by which herbal ingredients of *Mustadi kwath* bring about their anti- diabetic activities

CONCLUSION

Mustadi kwath mentioned in ***Bhaishajaya Ratnawali*** contain 9 drugs. These drugs contains various medical properties which useful in treatment of *Madhumeha*. These drugs also have good sorce of biologically active constituents which helps in breaking the pathology of

*Madhumeha.*In the present review attempt has been made to provide a collective knowledge on therapeutical and pharmacological application of *Mustadi kwath*. *Pradhan chikitsa* is that which cure disease without causing any side effect, so treatment with *Mustadi kwath* is an ideal choice as it not only treat the disease also have no side effect on the patients.

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