



ORIGINAL RESEARCH PAPER

Ayurveda

DRUG COMPILATION OF EKAL AUSHADHI EVAM AUSHADHI YOGA IN MADHUMEH: AN AYURVEDIC REVIEW

KEY WORDS: madhumeha, Diabetes Mellitus, hyperglycaemia, metabolic disorder.

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ABSTRACT

Premea is a set of symptoms which includes all those clinical conditions which are characterized by increased quantity of urine related with or without the increased frequency of micturition. Polyurea and Turbidity of the urine are the two Essential presenting features of his diseased state. Diabetes Mellitus is defined as a heterogeneous metabolic disorder categorized by common feature of chronic hyperglycaemia with disturbance of carbohydrate, fat & protein metabolism. Diabetes mellitus in recent times is fast becoming the world's largest silent killer. There are estimated 72.96 million cases of diabetes in adult population of India. The prevalence in urban areas ranges between 10.9% and 14.2% and prevalence in rural India was 3.0-7.8% among population aged 20 years and above with a much higher prevalence among individuals aged over 50 years. The purpose of this compilation to focus on herbal formulations & Therapeutic uses of most *antidiabetic herbs* to treat *madhumeha* (Diabetes Mellitus) patients.

INTRODUCTION-

The disease condition in which the urine becomes sweet and smells like honey. It is of two distinct types, one due to the aggravation of *Vata* on account of the *Dhatukshya* and the other due to *Kapha-Meda Avarana* (Blockage of channel) along with *Vata prakopa*¹. When there is condition of *Avarana* (blockage of the channels/activity) there are the additional symptoms of the vitiation of the particular *Dosha* without any other apparent cause. Sometimes the symptoms are mild and suddenly they appear in severe form which is difficult to cure. Ayurvedic formulations for *Madhumeha* (Diabetes Mellitus) are the oldest among all the available therapies. *Premea* are a list of urinary disorders, especially characterized by profuse urination with several abnormal qualities due to imbalance of *Doshas*. Interestingly enough the terms *madhumeha* and *diabetes mellitus* are analogues *Madhu* & *mellitus* mean honey and thus *madhumeha* and *diabetes mellitus* mean passing of large quantity of sweet urine².

Pathogenesis³

In *caraka chikitsa*, the *samprapti* for three different types of *pramehas* viz., *Kaphaja*, *pittaja* and *vataja* have been briefly explained. *Kapha* situated in *Vasti* vitiates *meda*, *mamsa* and *Sareera* *Kleda* and produces *kaphaja mehas*.

Similarly, *pitta* aggravated by *pittaja bhavas* vitiates the same elements to produce *pittaja mehas*. '*Vataja Mehas*' *Samprapti* differs slightly. When *vata* gets aggravated, the other two *dosas* diminish in quantity and this aggravated *vata* draws the *dhatu maja vasa lasika* and *Oja* to the *vasti* and produces *vataja mehas*.

AIMS AND OBJECTIVE-

- 1- To access clinical presentation of *Madhumeha*.
- 2- To access the principal management and compilation of *Ekal Aushadhi Evam Aushadhi Yoga* in *Madhumeha*.

MATERIAL AND METHOD-

The Literary material related to *madhumeha* has been collected from different *Sthans* (parts) of *Samhitas*.

Single Plant Drugs

SR.NO	LOCAL/SANSKRIT NAME	BOTANICAL NAME
1	Palandu	Allium cepa
2	Nimb	Azadirachta indica
3	Meshshrang	Gymnema sylvestre
4	Bilva	Aegle marmelos
5	Vijaysaar	Pterocarpus marsupium

6	Methi	Trigonella foenum-graecum
7	Karvellak	Momordica charantia
8	Jambu	Syzygium cumini
9	Bimbi	Coccinia indica
10	Mamajjak	Enicostemma littorale
11	Haridra	Curcuma longa
12	Amalki	Phyllanthus emblica
13	Bhallatak	Semecarpus anacardium
14	Amrabeej	Mangifera indica
15	Lodhra	Symplocos racemosa roxb
16	Palash	Butea monosperma
17	Babool	Vachellia nilotica
18	Bala	Sida cordifolia
19	Tejpatra	Cinnamomum tamala
20	Khadira	Acacia catechu
21	Amrita	Tinospora cordifolia
22	Sem	Lablab purpureus
23	Saptachakra	Salacia chinensis

Aushadhi Yoga- Ayurdic Formulations

SR.NO.	AUSHADHI YOGA-RASA/BHASM	MAIN INGREDIENTS
1	Basant kusumakar ras	Swarn, rajat, vang, abhrak etc.
2	Vrahad vangeswar ras	Parad, gandhak, vanga, abhrak etc.
3	Tarkeshwar rasa	Parad, gandhak, vanga, gokshur etc.
4	Swarn vanga bhasm	Parad, sendhav, gandhak, vanga etc.
5	Trivanga bhasm	Naag, vang, yashad bhasm
6	Apoorvamalini basant rasa	Vekrant, abhrak, tamra etc.
7	Hari shankar rasa	Parad, gandhak, swarnmakshik etc.
8	Swarn makshik bhasm	Sudh Swarnmakshik bhasm

SR.NO.	AUSHADHI YAGA-VATI/CHURNA	MAIN INGREDIENTS
1	Shiva gutika	Shilajatu, triphala, kutki etc.
2	Chandraprabha vati	Shilajatu, triphala, trikatu
3	Shilajatwadi vati	Shilajatu, abhrak, Swarna, guggul
4	Indravati	Rasa sindur, vanga, arjuna,
5	Trikatu gutika	Shunthi, marich, pippli
6	Nyagroadhya churna	Ashwatha, amalatas, bad, asan,

7	Triphala churna	Haritaki.vibhitaki, amalki
SR. NO.	AUSHADHI YOGA-KASHAYA/KWATH	MAIN INGREDIENTS
1	Lodhrasava	Lodhra, karpur, pushkarmool
2	Madhwasav	Lodhra, karpur, pushkar mool etc.
3	Dantyasav	Dantimool, lodhra, moorva, vidanga
4	Devdarvadi arishta	Devdaru, vasa, manjishta
5	phalatrikadi kwath	Triphala, daruharidra, vishala, mustak, haridra

SR.NO.	AUSHADHI YOGA-GHRITAM/TAILAM	MAIN INGREDIENTS
1	Dhanvantar ghritam	Dashmoola, karanj, devdaru,
2	Dadimadhya ghritam	Anar, vidanga, haridra,
3	Trikantakadhya ghritam	Gokshura, pashadbhed, bhallatak etc.
4	Triphala ghritam	Triphala, bhringaraaj, vasa, amalki
5	Pramehmihir ghritam	Shatpushpa, devdaru, haridra,

DISCUSSION-

The main causes of Premeha are lack of exercise and improper food habits in excess food intake which falls in the category of ushna, snigdha & guru are the primal cause of this disease.

Amrabej majja is the seed pulp of the green mango (*Mangifera indica*). Sharma *et al.* summarized the significant constituents of *M. indica* including mangiferin, a xanthone glycoside, that shows hepatoprotective, anti-inflammatory activity, reduced glucose absorption, hypoglycaemic activity and the ability to limit diabetic nephropathy.

Karela/ Karavallaka (*Momordica charantia*) It contained the alkaloid momoridine, as well as several glycosides. Sekhar reviewed six studies that reported the protective and regenerative properties of *M. charantia* extracts on β -cells of islets of Langerhans. Each of these studies found reversal of elevated blood sugar levels in diabetic rats induced by STZ or alloxan. In addition, various studies also indicated that many different extracts and preparations of *M. charantia* resulted in the recovery and regeneration of scattered islet β -cells selectively. In addition, *M. charantia* showed preventive effects as well as delay in progression of the diabetic complications of nephropathy, neuropathy, gastroparesis, cataracts and insulin resistance in experimental animals.

Using **jamun** extract, Kaushik *et al.* and Bansal *et al.* reported increase in cathepsin B activity, which assisted in proteolytic conversion of proinsulin to insulin.

Novotnik *et al.* reported a high content of trace elements in **neem** (*Azadirachta indica*) powder, including essential elements Cu, Se, Mo & Fe, as well as Zn and Cr. Chromium (III) is an essential micronutrient for glucose and lipid metabolism.

Onion/ palandu has recently been reported to have effects on hyperglycaemia, though Ayurveda has been using *palandu* for ages in diabetes. Jung *et al.* showed that onion extracts reduced hyperglycaemia in STZ-induced rats and proposed a mechanism of insulin sensitizing and hypoglycemic effect owing to the presence of high quercetin levels found in onion peels.

Asad *et al.* showed the effect of babbula (*Acacia nilotica*) extract on lowering blood glucose levels and in increasing insulin levels in diabetic rats.

Kanth and Diwan showed that bala (*Sida cordifolia*) has strong hypoglycemic properties as well as antiinflammatory properties in animals.

Methi or fenugreek seeds as a part of polyherbal formulations (*Trigonella foenumgraecum*) can significantly improve glycemic status, most probably through powerful antioxidant activity. Ahmed *et al.* showed that meshshurangi or gurmar (*Gymnema sylvestre*) increased serum insulin levels. Saravanamuttu and Sudarsanam reported isolation of antidiabetic principles from gurmar that included gymnemic acids, gymnemagenin and gymnestrogenin.

Recently, the ministry of AYUSH has helped develop, in collaboration with CSIR and CCRAS, two Ayurvedic anti-diabetic drugs namely BGR 34 and AYUSH 82.

CONCLUSION-

Ancient ayurvedic acharyas have very good knowledge about diabetes mellitus. There are so many drugs & formulations but the main drugs are either bitter (**Tikta**) or astringent (**kashaya**) in taste. They improve the fat and carbohydrate metabolism. Some of the drug of choice is (1) Shilajatu (2) Guggulu and (3) Haritaki & Amalaki. For obese persons Guggulu may also be used as Guggulu has been proved as hypo-cholesteric drug. According to types of madhumeha, bala, age, dhatu sara & prakruti the use of these herbal plant & metals is very significant & effective.

India is also a country with large biodiversity and a rich ancient tradition of the oldest continuously-practiced medical system on the planet, Ayurveda. Over half of the population uses some form of Ayurvedic practice, through herbs or lifestyle, or food combinations. Many of these herbs and foods lower blood sugar, thereby preventing complications until diabetes can be prevented.

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