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Review Article

## Ayurveda Internal Medicine for the Management of Common Metabolic Disorders W.S.R. to *Madhumeha* and *Sthoulya*

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### ABSTRACT

The metabolic disorders are major health issues of today's scenario and incidences of metabolic diseases increases day by day due to the disturbed pattern of life style. Ayurveda texts have described term "*Santarpanjanya Vikaras*" which resembles diseases of defective tissue metabolism. Ayurveda mentioned that improper dietary habits and sedentary life style affects state of *Agni* which resulted *Ama* production and finally leading to the metabolic syndrome. The vitiation of *Dosha*, diminish state of *Dhatu* and blockage of channels, etc. also can initiate pathogenesis of metabolic disorders. The *Kayachikitsa* branch of Ayurveda recommended use of internal medicine for the management of various metabolic disorders. Considering increased health burden of society due to the metabolic syndrome present article explore role of ayurveda internal medicine for the management of metabolic syndrome.

**Keywords:** *Ayurveda*, *metabolic syndrome*, *Santarpanjanya*, *Madhumeha* and *Sthoulya*.

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### INTRODUCTION

The metabolic disorders are considered as one of the major health issues now a days and prevalence of such diseases increases day by day due to the disturbed pattern of daily regimen. *Sthoulya/Medoroga*, *Prameha* and *Hridroga* are major metabolic disorders affecting population globally. The vitiation of *Medadhatu*, *Medodhatvagni* and *Rakta* can initiate pathogenesis of metabolic disorders. The indigested food sometimes forms *Ama* and when this *Ama* interacts with *Medadhatu* then *Sama Medadhatu* (unhealthy lipids) formed. The *Ama* when circulates throughout the body then it block micro-channels and affects normal circulatory process thus triggers pathogenesis of metabolic disorders [1-4].

Ayurveda described that *Snigdha*, *Pichhila* and *Guru Ahara Sevana*, *Madyapana* and *Atiasan* behavior, etc. can causes metabolic disorders, the other causative factors depicted in **Figure 1**.

Vitiation of *Kapha* plays a significant role towards the accumulation of *Amadosa* which can leads disorders such as; dyslipidemia, obesity and hyperglycemia etc.

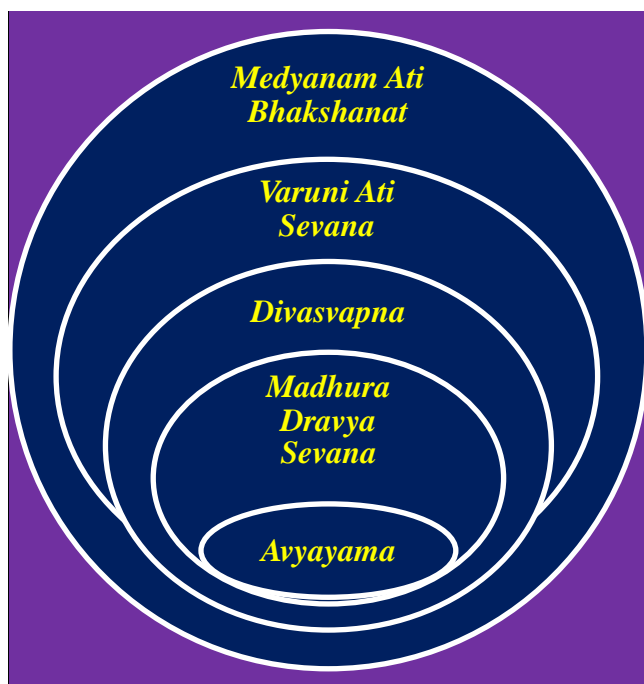
Vitiation of *Pitta* can leads *Medovridhi* associated with *Srotosanga*, *Vata* & *Vata* vitiation can create state of *Avrita Vata*.

The production of abnormal *Medadhatu* exceeded in metabolic disorders but its utilization suppresses resulting deposition of fat inside the body (atherosclerotic). The hormonal imbalance like can also cause diseases like; hyperglycemia and hyperthyroidism or hypothyroidism. Ayurveda mentioned that *Dusya* in *Rasa*, *Meda* and *Mamsa* can trigger pathogenesis of metabolic disorders.

The involvement of *Srotasa* in metabolic syndrome can't be ignored; it is believed that *Srotasadusti* in *Raktavaha*, *Rasavaha*, *Medovaha* and *Mamsavaha* *Srotasa* plays an important role towards the pathogenesis of metabolic disorders.

The metabolic disorders can be elaborated as *Santarpana Janya Vyadhi* since it involves vitiation of *Agni*, production of *Ama*, vitiation of *Kapha* and *Meda* etc. The major diseases comes under category of metabolic disorders are *Madhumeha* (diabetes mellitus), *Ati Sthoulya* (obesity), *Srotsam Lepa* (atherosclerosis), *Dhamani pralepa* (arterial disorders) and dyslipidemia. Ayurveda described various

approaches for the management of such problems including; conduction of healthy daily regimen, exercise, meditation, avoidance of stress and use of herbal medicine, etc. The use of internal medicine obtained from natural sources play key role in the management of metabolic disorders, considering this fact present article emphasizes role of internal medicine in metabolic disorders [2-5].



**Figure 1:** Causative factors of metabolic syndrome as per ayurveda.

## AYURVEDA MANAGEMENT OF METABOLIC SYNDROME:

The basic principles of treating metabolic syndrome as per Ayurveda involve use of drugs which alleviates *Vata*, reduces *Kapha* and help to regularizes circulatory and hormonal functional of body. The drug which metabolizes excessive fat and improves digestive fire also offers beneficial effects in case of metabolic disorders. Ayurveda recommended *Aptarpana*, *Vanaspati Kashaya*, *Lekhana Kashaya* and *Kaphahara Chikitsa* for the management of metabolic disorders especially related to the excess deposition of fat. The **Table 1** showed various herbs and formulations used for the management of metabolic disorders [6-10].

**Table 1:** Herbs and formulations used for the management of metabolic disorders:

Compound formulations	Herbs
<i>Medohara guggulu</i>	<i>Vrikshamla (Garcinia indica)</i>
<i>Nisamlaki Churna</i>	<i>Guggulu (Commiphora mukul)</i>
<i>Punarnavadi guggulu</i>	<i>Meshshringi (Gymnema sylvestre)</i>
<i>Sapragandha ghanavati</i>	<i>Rasona (Allium sativum)</i>
<i>Puskarabramhi guggulu</i>	<i>Puukaramula (Inula racemosa)</i>
<i>Triphaladi guggulu</i>	<i>Arjuna (Terminalia arjuna)</i>
<i>Amritadi guggulu</i>	<i>Haridra (Curcuma longa)</i>

The specific therapeutic benefits of various ayurveda medicines in metabolic disorders depicted in **Table 2**.

**Table 2:** Drugs and their role in metabolic disorders:

S. No.	Ayurveda Drugs	Therapeutic benefits in metabolic disorders
1	<i>Trikatu Churna</i> , <i>Chitrakadi Vati</i> and <i>Pippali Churna</i>	Promote <i>Agni</i> and correct metabolic process.
2	<i>Amalaki</i> , <i>Guduci</i> , <i>Silajatu</i> and <i>Haridra</i> etc.	Promote <i>Ojas</i> (immunity enhancer).
3	<i>Guduchi</i> , <i>Triphla</i> , <i>Musta</i> and honey, etc.	Helps to remove excessive fat.
4	<i>Shunthi</i> , <i>Vidanga</i> , <i>Yavaksara</i> , barley powder and <i>Amalaka</i>	Offers beneficial effects in management of obesity and corrects digestive fire.
5	<i>Dasamoolarishta</i>	Helps in jaundice and <i>Prameha</i> .
6	<i>Kaisora Guggul</i>	Useful in diabetes.

## AYURVEDA MEDICINE FOR MADHUMEHA:

Diabetes is a condition in which body fails to metabolize carbohydrate properly or sugar level increases. Ayurveda herbs offers several health benefits in diabetes such as; suppression of root cause of disease, strengthening immunity, enhances digestion, regularizes hormonal level and boosts overall circulatory process. *Jamuna (Syzygium Cumini)*, *Daruharidra (Berberis lyceum)*, *Gudmaar (Gymnema Sylvestre)*, *Karela (Momordica Charantia)* and *Haridra (Curcuma Longa)*, etc. can be used as a natural drugs in case of diabetes.

### *Jamuna (Syzygium Cumini)*

The seeds of *Jamuna (Syzygium Cumini)* offer health benefits in diabetes especially seeds of plant. Ayurveda also mentioned *Jamuna* as digestive ailments; the *Jamun* seeds contain substance called *Jamboline* which suppress release of sugar into blood stream.

### *Daruharidra (Berberis lyceum)*

*Daruharidra* is a common ayurveda drug used for diabetes, its root produces berberine which relief symptoms of diabetes. The symptoms of related to skin and eye of diabetes improved by root of *Berberis lyceum*. It improves parameters like body weight, amount of urine and lowers down the fasting blood glucose levels.

### **Gudmaar (*Gymnema Sylvestre*)**

*Gudmaar* suppress sweetness due to the presence of active components named gymnemic acid, it make sweet foods less appealing thus prevent desire to consume sweet food. It can be used in combination with other medicine to lower down blood sugar level.

### **Karela (*Momordica Charantia*)**

*Karela* is commonly used as vegetable but it persists medicinal properties and offers therapeutic benefits in the management of diabetes. It contains hypoglycemic compound which helps to lower down sugar levels in blood. The charantin is one of the chief components found in *Karela* which offers blood glucose lowering effect. Another compound polypeptide-p also control diabetes naturally.

### **Haridra (*Curcuma Longa*)**

Turmeric rhizomatous can be used for the treatment of diabetes; it contains curcumin which reduces glycemia and hyperlipidemia. It balances overall blood sugar levels, reduces fat and cure symptoms of diabetes.

### **AYURVEDA MEDICINE FOR *STHAULYA/MEDOROGA***

Obesity is one of the common metabolic disorders mainly occurs due to the bad conduction of daily regimen and disturbed dietary pattern. Ayurveda described various herbs for the management of obesity including; *Triphala*, *Guggul*, *Kalonji*, *Punarnava*, *Aloe vera* and *Pepper*, etc. *Shyamaka*, *Yavaka*, *Kulatha*, *Makustha* and *Patola* types of fruits can be used for obesity.

### **Triphala**

*Triphala* is a poly-herbal formulation containing *Amalaki*, *Bibhitaki* and *Haritaki*, it reduces weight and metabolizes excess fat from body and regularizes digestive and circulatory functions thus relief various metabolic disorders.

### **Guggul**

*Guggul* is a dried resin used mainly for weight loss purpose. It breaks fat cells, regulates hormonal balances and control metabolic activities of body thus help in obesity. It reduces deposited fat and along with other medicine it control obesity associated with diabetes.

### **Kalonji**

*Kalonji* known as black cumin, the seeds and oils of seeds offers weight loss properties thus help in case of obesity.

### **Vijaysar**

It offers anti-hyperlipidemic properties, reduces total cholesterol, low-density lipo-protein and also controls serum triglyceride levels thus help to treat obesity. It relief symptoms of metabolic diseases like; frequent urination, overeating and numbness. *Vijaysar* also help to treat obesity associated with diabetes.

### **CONCLUSION**

The metabolic disorders has now becomes major health issues in current scenario and incidences of such cases increasing day by day due to the disturbed pattern of daily regimen. Ayurveda mentioned that improper functioning of *Agni*, production of *Ama*, vitiation of *Dosha & Dhatu* and blockage of channels, etc. can leads metabolic disorders. *Madhumeha*, *Ati Sthoulya*, *Srotsam Lepa*, *Dhamani pralepa* and *dyslipidemia* etc. are diseases which can be considered as metabolic disorders. The branch of Ayurveda; *Kayachikitsa* recommended use of internal medicine for the management of various metabolic disorders along with conduction of healthy daily regimen, meditation, exercise and *Yoga* etc. Herbs like; *Vrikshamla Guggulu*, *Meshshringi*, *Rasona*, *Puukaramula*, *Arjuna* and *Haridra*, etc. can be used for the along with formulations such as; *Medohara guggulu*, *Nisamlaki Churna*, *Punarnavadi guggulu*, *Sapragandha ghanavati*, *Puskarabramhi guggulu*, *Triphaladi guggulu* and *Amritadi guggulu*, etc. These all drugs obtained from natural origin and offer several health benefits in the management of metabolic disorders. The *Aptarpana*, *Vanaspati Kashaya*, *Lekhana Kashaya*, *Kaphahara* and *Vatahara* effects of these internal medicine helps to break pathogenesis of metabolic disorders and can be used as alternative therapy for the management of diseases like; *Madhumeha*, *Ati Sthoulya* and *Dhamani pralepa*, etc.

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