

**SAMPRAPTHI & AYURVEDA MANAGEMENT OF METABOLIC DISORDERS W.S.R.
TO OBESITY AND DIABETES****Neha Milind Sahare*¹ and Vijay Ratanlal Patha²**¹Associate Professor, Dept of Rog Nidan Vikriti Vigyan, Veena Vadini Ayurvedic College & Hosp, Behind Kanha Kunj, Kolar Road, Bhopal, India.²Associate Professor, Dept of Samhita Siddhant, Veena Vadini Ayurvedic College & Hosp, Behind Kanha Kunj, Kolar Road, Bhopal, India.***Corresponding Author: Neha Milind Sahare**

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ABSTRACT

The metabolic syndromes are one the types of diseases affecting mankind globally, the prevalence of such diseases increases day by day due to the disturbed life style and bad dietary habits. Obesity, diabetes, hypertension and dyslipidemia are some common metabolic diseases. Present article described pathogenesis and ayurveda management of two important metabolic disorders; diabetes and obesity. Ayurveda describe obesity as *shaulya* which is one of the "*Medoroga*" since *meda* and *mamsa dhatu* are exaggerated in pathogenesis of obesity. Excess fat accumulation in *shaulya* further leads other complications such as; hypertension, cardiac problems and *madhumeha*, etc. Ayurveda recommended *Ahar-Vihar*, *Yoga*, *Panchakarma* and use of drugs therapy for the management of obesity. Another severe metabolic disorder is diabetes (*Madhumeha* or *Prameha*). As per ayurveda *Prameha* associated with all types of *Doshas* imbalances; *Vata*, *Pitta* and *Kapha*. Ayurveda suggested conduction of *pathya*, *sodhana karma*, *yoga*, use of ayurveda formulation and herbs for the management of diabetes.

KEYWORDS: *Ayurveda, Obesity, Medoroga, Diabetes, Prameha.***INTRODUCTION**

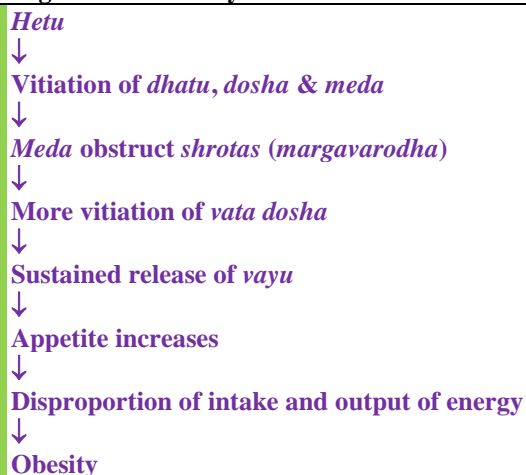
Metabolic syndrome is burning problem of today's time and lot of attention has been made towards such problem in past few years. Aging, genetics, disturbed lifestyle & dietary habits, presence of other diseases and deteriorated environmental conditions, etc. are the factors which may causes metabolic disorders. Obesity, dyslipidemia and hyperglycemia, etc. are some common metabolic disorders out of them obesity and hyperglycemia (diabetes) affecting making severely. The current scenario witnessed that large number of teenagers and elderly population suffered with metabolic disorders. Metabolic diseases may involve abnormal metabolism of *meda*, vitiation of *ahara rasa* & *jatharagni*, disturbed hormonal regulation and *tridoshic* imbalance.^[1-3]

Obesity (*sthaulya*) is one of the disgraceful diseases associated with accumulation of *meda* and *mamsa* leading to; excessive growth of abdomen, hips, breast and other adipose tissues of body. *Medas* perform functions like; *sneha*, *drudhatva* and *asthipushti* while it possess *snigdha*, *guru*, *sthula*, *mridu*, *picchila* and *sandra guna*. Therefore excessive consumption of *snigdha*, *guru* and *madhuradi ahara* along with disturbed life style may increases *medas* which further

causes *sthaulyam*. Hypertension, cardiovascular risk and diabetes are some consequences of obesity.^[4-6]

Diabetes (*Prameha*) is another commonly occurred metabolic disease which involves high blood sugar level, frequent urination and other symptoms. *Prameha* associated with vitiation of *vata dosha* (incurable), vitiation of the *pitta dosha* (difficult to cure) and *prameha* associated with vitiation of *kapha dosha* (curable) therefore *prameha* are *sadhya*, *yapya* and *asadhya* depending upon involvement of *dosha*. *Prameha* due to genetic predisposition (*bija dosha*) termed as *saheja prameha* while *prameha* due to ageing, disturbed life style and other environmental factors termed as *apathyani mittaja*. *Bahudravasleshma* and *Bahuabaddhameda* are the major pathological factors of *prameha* as per ayurveda.^[7,8]

Pathogenesis of Obesity



Vata in pathogenesis of obesity

Etiological factors vitiate *vata* causing disturbed transportation of *vayu* which resulted uneasiness, restless, disturbed mood & irregular appetite leading to primary symptoms of obesity.

Pitta in pathogenesis of obesity

Vitiation of *pitta* due to the etiological factors resulted hunger and also disturbed eating habits. *Pitta* affect eating sense and increases tendency to eat noxious foods such as; sugar, coffee, fat, oil and meat which increases weight and flabbiness.

Kapha in pathogenesis of obesity

Vitiated *kapha* slow down metabolic process, enhance weight gain tendency, disturbed hormonal regulation, causes fat deposition, affect pancreatic activity and decreases digestive fire therefore vitiated *kapha* may be considered responsible for obesity.

Management of Obesity

Ahara

- Oily food, fast foods and heavy food articles should be avoided.
- Whole grains, fruits and vegetables recommended fastening metabolic activities.
- *Bilva*, *Amalaki*, *Bibhitaki*, *Haritaki* & *Jambu* offer relief in obesity.
- *Patol*, *Shigru*, *Trapusha*, *Vartaka* & *Granjanak* also recommended.

Drugs

- Drugs having *Katu*, *Tikta*, *Laghu*, *Kashaya Rasa*, *Ushnavirya*, *Tikshna Guna*, *Katuvipaka Lekhana*, *Deepana-Pachana*, *Kapha-Vatahara* and *Sroto-Shodhaka* properties relief severity of *Sthaulya*.

Pathogenesis of diabetes

Hetu (diet, lack of exercise, mental stress, strain, genetic predisposition, obesity and excessive sleep) causes vitiation of *vata*, *pitta* & *kapha* leading to vitiation of *rasa* & *rakta* which further affect *medas*, *mamsa* & *kleda* which resulted *shaithilyata* and finally *prameha*

observed. Disturbances of metabolic activities, hormonal disturbances, vitiation of *kapha* due to *nidana sevana* and vitiation of *meda* & *rakta dhatu* affect pathological progression of disease and symptoms such as; *Trishna*, *Alaji*, *Vidradhi*, *Daha*, *pidaka Daurbalya* and *Putimaisa* may observed. The following elements play significant role in pathogenesis of diabetes.

Samprapthi Ghatakas of diabetes

Dosha:	<i>Vata</i> , <i>pitta</i> , <i>kapha</i>
Dushya:	<i>Meda</i> , <i>mamsa</i> , <i>kleda</i> , <i>rakta</i> , <i>vasa</i> , <i>majja</i> , <i>lasika</i> , <i>rasa</i> and <i>ojas</i>
Srotas:	<i>Mootravaha</i>
Srotodusti:	<i>Atipravritti</i>
Agni:	<i>Dhatvagni</i>
Udhbhavasthana	<i>Kostha</i>
Vyaktasthana	<i>Mootravaha srotas</i>

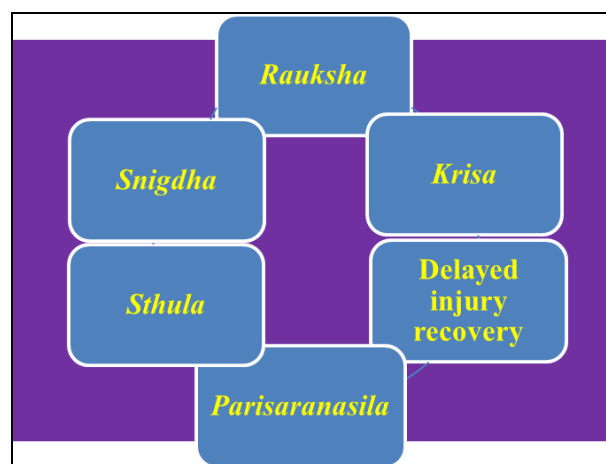


Figure 1: General symptoms of diabetes.

Management of Diabetes^[9-12]

Ahara

- *Tikta shaka*; *Karela*, *Patola*, *Methi*, *Rasona* and *Udumbara* etc.
- *Mudga*, *Kulattha*, *Chanaka* & *Adhaki* etc.
- *Harina mamsa*, *Kapotha*, *Shashaka mamsa* & *Titira* etc.
- *Jambu*, *Kapitta*, *Amalaki*, *Kharjura*, *Tala phala*, *Kamala* & *Utpala* etc.

Yoga

Matsyasana
Mandukasan
Ushtrasan
Sirsasana
Paschimotasana
Uddiyan Bandha
Ardha matsyendrasana.

Medicine

Mehakalanal Rasa
Vanga Bhasma
Panchanan Rasa
Rasasindoor
Yasada Bhasma

Guduchi swarasa
Chandraprabha
Amalaki Curna.

(Type 2 Diabetes Mellitus), Dev Sanskriti:
 Interdisciplinary International Journal, 1, 49-63.

REFERENCES

1. Ford ES, Giles WH, Dietz WH. "Prevalence of metabolic syndrome among US adults: findings from the third National Health and Nutrition Examination Survey". JAMA, 2002; 287(3): 356–359.
2. Agnivesha: Charaka Samhita, elaborated by Charaka & Dridhabala with the Ayurvedadipika Commentary by Chakrapanidatta, edited by Vaidya Yadavaji Trikamji Acharya, reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2011. Nidana sthana Chapter 4, verse 7, 212.
3. Sushruta: Sushruta Samhita with Nibandhasangraha Commentary of Shri Dalhanacharya & Nyayachandrika Panjika of Shri Gayadasacharya, edited by Vaidya Yadavaji Trikamji Acharya, reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2012. Sharira sthana, Chapter 4, verse 12, 356.
4. Sushruta. Sushruta Samhita, with the Commentaries, Nibandhasangraha of Dalhanacharya and Nyayachandrika of Sri Gayadasa, Edited by Yadavji trikamji acharya and Narayanaramacharya 'Ka-Vyatitirtha'. 8th ed. Varanasi: Chaukambha orientalia, 2005; 824; 1.
5. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. Journal of the American Medical Association, 2014; 311(8): 806.
6. Gupta DK, Shah P, Misra A, Bharadwaj S, Gulati S, Gupta N, et al. Secular trends in prevalence of overweight and obesity from 2006 to 2009 in urban Asian Indian adolescents aged 14-17years. PLoS One, 2011; 6: e17221.
7. Sushruta. Sushruta Samhita, with the Commentaries, Nibandhasangraha of Dalhanacharya and Nyayachandrika of Sri Gayadasa, Edited by Yadavji trikamji acharya and Narayanaramacharya 'Ka-Vyatitirtha'. 8th ed. Varanasi: Chaukambha orientalia; 2005. 824. 1
8. A Clinical Study on the Role of *Pathya* and *Medohar Yoga* in the Management of *Sthauly* (Obesity) – Pandya Amarish – 1994.
9. Astanga Hridaya, edited by Prof. K.R. Srikantha Murthy, Krishnadas Academy, Varanasi, IIIrd edi., 2000.
10. Ashtanga Hridayam- Chikitsa sthanam ; Vagbhata, Translated into English by Dr.K.R. Srikantha Murthy ; Chaukamba Oriental Publisher
11. Charak Samhita edited by Shashtri KM and Chaturvedi GN (1977): 5th Ed., Part I and II (Sutrastana 17:78-80), Chaukhamba Sanskriti Sansthan, Varanasi.
12. Bhardwaj D, Agnihotri VK, Pandya P (2012): Clinical Evaluation of an Ayurvedic Formulation in the Management of Avaranajanya Madhumeha