

CONCEPTUAL STUDY OF PREVENTIVE ASPECT OF DIABETES BY AYURVEDA

¹*Vd. Nisha D. Ghuge, ²Vd. G. G. Asati and ³Vd. G. H. Kodwani

¹PG Scholar in Rognidan Department, Government Ayurved College, Nagpur.

²Asso. Professor (Guide) in Rognidan Department, Government Ayurved College, Nagpur.

³HOD of Rognidan Department, Government Ayurved College, Nagpur.

Article Received on
18 April 2021,

Revised on 10 May 2021,
Accepted on 30 May 2021

DOI: 10.20959/wjpr20216-20654

*Corresponding Author

Vd. Nisha D. Ghuge

PG Scholar in Rognidan

Department, Government

Ayurved College, Nagpur.

ABSTRACT

In present era, lifestyle as an important factor of health is more interested by health researchers. So diseases that are caused partly by unhealthy behaviours and partly by other factors. Cardiovascular diseases, diabetes, stroke, cancer etc. are the lifestyle disorders. Millions of people follow an unhealthy lifestyle, Hence, they encounter illness, disability, and even death. In this cases, Ayurveda provides better solution in the forms of proper dietary management, lifestyle advises, *yoga*, *pranayama* and meditation. In Ayurveda, very well explained of *Hetus* of *Prameha* which is correlate with diabetes. Prediabetes is a menace of modern day sedentary lifestyle. If it is

unattended, the person might become diabetic. Prediabetes is a condition in which BSL is higher than normal but not high enough to be classified as type 2 diabetes. With healthy lifestyle changes such as eating healthy foods, physical activity in daily routine and maintaining a healthy weight which is described in Ayurveda.

KEYWORDS: Lifestyle disorder, *Yoga*, *Pranayama*, *Prameha*, Prediabetes, Type 2 diabetes.

INTRODUCTION

Ayurveda is a science of life which connects physical, spiritual and physiological processes to promote a healthy relationship between mind, body and soul. *Vata Pitta kapha* are three *Doshas* of body^[1] as well as *Satva*, *Raja* and *Tama* are three *Doshas* of mind.^[2] striking an equilibrium between the *Doshas* corresponds to good health. Imbalance between them which

leads to disease.^[3] So to bring the *Doshas* into optimal balance by prescribing procedural, medicinal and herbal prescription with use of good diet, exercise and lifestyle.

Lifestyle diseases are ailments that are primary based on the day-to-day habits of people that distract people from activity and push them towards a sedentary routine that can lead to chronic non communicable disease such as cardiovascular disease, stroke, diabetes, certain forms of Cancer, are heavily linked to Lifestyle choices.^[4] India has an estimated 77 million people with diabetes which makes it the second most affected in the world. About one-third of type 2 diabetes in India are overweight or obese. The prevalence of type 2 diabetes in Indians may be due to environmental and Lifestyle changes resulting from industrialisation and migration to Urban environment to rural.^[5] So Diabetes mellitus is a Lifestyle disease that is caused partly by unhealthy behaviour and partly by other factors.

Prediabetes is a early stage or blood sugar level is higher then it should be but not high enough for to diagnose diabetes. People with type 2 diabetes almost always had prediabetes but it sometimes asymptomatic. Prediabetes treatment can prevent more serious health problems including type 2 diabetes secondary damage to heart, blood vessel, eyes and Kidneys.^[6] In this article, we tried to study prevention of diabetes in early stage by ayurvedic perception.

AIM AND OBJECTIVES

- 1) To study the concept of diabetes in modern science as well as in Ayurveda.
- 2) To study prevention of diabetes in early stage by Ayurvedic perception.

MATERIAL AND METHODS

The whole study is based on the literary material through *Brihatrayii*, disease related to topic and information from contemporary modern texts, available resources, research article and paper published on internet

DISCUSSION

Concept of Diabetes in modern science as well as in Ayurveda

Diabetes mellitus is a group of metabolic disorder hyperglycaemia, diabetes results from defect in insulin secretion, insulin action or most commonly both. The chronic hyperglycaemia and attendant metabolic regulation may be associated with secondary damage in multiple organ systems specially the kidneys, eyes, nerves and blood vessels.^[7]

The most important environmental factor for type 2 diabetes is obesity greater than 80% of individuals with type 2 diabetes are obese. A Sedentary lifestyle is another risk factor for diabetes independent of obesity.^[8]

In Ayurveda, *Acharya Charak* and *Acharya Sushrut*, both mentioned the *Hetus* of *Prameha* which are similar to sedentary lifestyle and unhealthy diet.^{[9],[10]} Diabetes Mellitus corresponds to *Prameha* in Ayurveda. Many studies Successfully worked on it. By *Acharya sushrut*, *Shatkriyakala* is distinctive concept of Ayurveda. Increases *Doshas* in their own sites is called as *Sanchay-Awastha* (stage of accumulation). In this stage mild symptoms are seen. It is very beneficial to cure the person in this stage. These deranged *doshas* are rendered in *sanchayawastha* they are not able to move into next stage, if they are neglected and not treated they become stronger and more intensive in the course of their next stage.^[11] By knowing the process of *Shatkriyakala*, the diabetic pathogenesis can be arrest at Prediabetes stage and avoid probabilities of complications.

Diagnosis

Diagnostic criteria for Diabetes mellitus (According to WHO and ADA)^[12]

- 1) Fasting plasma glucose > 125 mg/dl
- 2) 2 hr plasma glucose > 200 mg/dl
- 3) Random plasma glucose > 200 mg/dl
- 4) A glycosylated Hb (HbA1C) level > 6.4%

Impaired glucose tolerance (Prediabetes)^[12]

- 1) Fasting plasma glucose = 100 – 125 mg / dl
- 2) 2 hr plasma glucose = 140 – 199 mg /dl
- 3) Random plasma glucose = 140 – 199 mg /dl
- 4) A glycosylated Hb (HbA1C) level = 5.7% - 6.4%

Prevention of Diabetes In Early Stage by Ayurvedic Perception

The purpose of Ayurveda is to protect health of the healthy and curing the diseases of diseased. The concept of *nidan parivarjan* is useful for the both purposes. This concept is useful for the treatment of disease prevention of disease and stop the recurrence of it. This concept of *nidan parivarjan* best explained in *Charak Samhita* at *Viman Sthan* 7th chapter while explaining *krumi chikitsa*. In early stage patient with type 2 diabetes may not need insulin diabetes in this patients is typically controlled with diet and exercise that is *nidan*

parivarjan concept of Ayurveda sometimes oral medication are also prescribed in some cases or advanced cases of type 2 diabetes insulin may also be required

Nidan or hetus of prameha (diabetes)^{[9],[10]}

- 1) *Aaharaj hetu*: excessive intake of *dadhini gramyaudaka aanup rasah, guru, snigdha, amla, Lavan, Nava Annapan* (freshly harvested grains / alcohol), *gudavaikrutam* (jaggery preparations/sweets)
- 2) *Viharaj hetu*: excessive indulgence of *Vyayam, Nidra, Asyasukh* (sedentary habits), *Chinta*(stress).

Also in modern science, modifiable diabetes risk factors that is having unusual sleep disturbances, unhealthy diets, abdominal obesity, high cholesterol, stress, anxiety, smoking etc.

Using the concept of Nidanparivarjan, Lifestyle modification -

- No smoking,
- Weight reduction > 5%
- Physical activity - walking for > 30 minutes per day
- BMI < 23 kg / m²
- Healthy diet
- limit salt consumption
- Exercise (*yoga, pranayam, meditation*)
- Good sleep

Also some concepts described in Ayurveda which are useful in some extent in prevention of diabetes i.e.

Rasayana^[13]

Rasayana is any herb, food or activity which confers youthfulness and cure disease. *Rasayana* includes purification of all tissues from *rasa* to *Shukra*

Sadvritta^[14]

- 1) *Sharirik sadvritta* (good personal conduct)
- 2) *Mansik sadvritta* (good mental conduct)
- 3) *Samajik sadvritta* (good social conduct)
- 4) *Dharmik sadvritta* (good religious conduct)

RESULT

The purpose of Ayurveda is to protect health of the healthy and curing the diseases of diseased. The concept of *nidan parivarjan* is useful for the both purposes. This concept is useful for the treatment of disease prevention of disease and stop the recurrence of it. This concept of *nidan parivarjan* best explained in *charak Samhita* at viman Sthan 7th chapter while explaining *krumi chikitsa*

	Nidan or hetus of prameha (diabetes)	Nidanparivarjan
1) Aaharaj hetu	2) excessive intake of <i>dadhini gramyaudaka aanup rasah, guru, snigdha, amla, Lavan, Nava Annapan (freshly harvested grains / alcohol), gudavaikrutam (jaggery preparations/ sweets)</i>	healthy diet -limit salt consumption -no smoking, -weight reduction > 5%
3) Viharaj hetu	4) Excessive indulgence of <i>Vyayam, Nidra, Asyasukh</i> (sedentary habits), <i>Chinta</i> (stress).	physical activity - walking for > 30 minutes per day BMI < 23 kg / m ²

CONCLUSION

Diabetes prevention is a basic as ending more healthy food and becoming more physically active and losing extra weight that is maintaining BMI. It's never too late to start type 2 diabetes is a serious, chronic health conditions that can lead to serious health complication such as heart disease, stroke, kidney failure etc. Prevention is better than cure, so modification of lifestyle by according to Ayurveda in Prediabetes condition then lower the risk of all those other condition.

REFERENCES

1. Dr. Tripathi. B. Ashtanghridayam, Nirmala hindi commentary, sutrasthan, Ayushkamiya adhyay, Adhyay no. 1, verse no. 6, Chukhamba sanskrit pratishthan, Delhi, 8.
2. Dr. Tripathi. B. Ashtanghridayam, Nirmala hindi commentary, sutrasthan, Ayushkamiya adhyay, Adhyay no. 1, verse no. 21, Chukhamba sanskrit pratishthan, Delhi, 17.
3. Dr. Tripathi. B. Ashtanghridayam, Nirmala hindi commentary, sutrasthan, Ayushkamiya adhyay, Adhyay no. 1, verse no. 20, Chukhamba sanskrit pratishthan, Delhi, 16.
4. https://en.m.wikipedia.org/wiki/Lifestyle_disease
5. <https://pubmed.ncbi.nlm.nih.gov/12674166/>
6. <https://www.webmd.com/diabetes/what-is-prediabetes>
7. Kumar, Astern, Abbas, Robbin and cortan's pathologic Basis of diseases, south asia edition, II: 1105.

8. Kumar, Astern, Abbas, Robbin and cortan's pathologic Basis of diseases, south asia edition, II: 1111.
9. Dr. Tripathi. R. Charaksamhita, vaidyamanorama hindi commentary, chikitsasthan, pramehchikitsa adhyay, Adhyay no. 6, verse no. 4, Chukhamba sanskrit pratishthan, Delhi, 164.
10. Ambikadattshastri k. Sushrutsamhita, Ayurvedtatvasandipika hindi commentary, nidansthan, prameha nidan adhyay, adhyay, 6(3): 326.
11. Ambikadattshastri k. Sushrutsamhita, Ayurvedtatvasandipika hindi commentary, sutrasthan, vranaprashna adhyay, adhyay, 21(18): 117
12. Kumar, Astern, Abbas, Robbin and cortan's pathologic Basis of diseases, volume II, south asia edition, 1106.
13. Dr. Tripathi. R. Charaksamhita, vaidyamanorama hindi commentary, chikitsasthan, rasayan adhyay, Adhyay no. 1, verse no. 8, Chukhamba sanskrit pratishthan, Delhi, 5.
14. Dr. Tripathi. B. Ashtanghridayam, Nirmala hindi commentary, sutrasthan, Dincharya adhyay, Adhyay no. 2, verse no. 46, Chukhamba sanskrit pratishthan, Delhi, 39.