LIFESTYLE MODIFICATION PLAN AS PER AYURVEDA IN GERIATRIC

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ABSTRACT

Majority of major chronic diseases relevant today are now being claimed to relate to the errors of lifestyle. Most of such diseases have prevention potential but they are difficult to cure once they really occur. Lifestyle management is the seat anchor of treatment for such ailments. Scenario faced by Ayurvedic physician, Patients of Diabetes may visit in the following situation. Immediately after Diagnosis, after receiving modern treatment for six month to one year, terminally ill patients, in which, patient's relatives call up for Ayurvedic physician, in many cases, Ayurvedic physician has to go for Diagnosis; Role of Ayurvedic physician, Ayurvedic treatment, lifestyle modification plan as per Ayurveda. This research paper is dedicated for Lifestyle modification plan and its implementation in the patients suffering from Diabetes. Hereby I am presenting strategy and action plan regarding lifestyle management as per Ayurveda. Lifestyle management plan: Ahar (Diet) / Nidra (Sleep), Vihar, Dinacharya, Behavior modification plan, Model diet plan, Model Dinacharya plan / Sleep pattern, Behavior modification plan. Tools used for Behavior modification plan, Music therapy, Yoga / Asana, Rasayana, Self Contract method.

Keywords: Diabetes, Diet plan, Rasayana, Music theory Relaxation theory.

INTRODUCTION

It is amazing to notice that the Ayurvedic classics conceived this idea thousands of years ago and emphasized the role of faulty lifestyle and dietetics in the causation of different diseases. The concepts of Swasthavritta, Sadvritta, Aacharrasayan and nidan parivarjana were the strategies of prevention and treatment. Diabetes mellitus is a syndrome of disordered metabolism of carbohydrate, protein, and fat with manifestation of persistent hyperglycemia due to deficiency of Insulin secretion or a reduction of its effectiveness or both. Long-term association of this disease may lead to retinopathy, neuropathy, Ayurveda in great details. The description available in Ayurvedic classics exhibits an account of a highly nephropathy and micro vascular complications. Diabetes mellitus has striking resemblance to Prameha and Madhumeha as described in developed knowledge about this disease. Its causes manifestations, complications and management which appear highly contemporary and seem to provide leads for further research and development. The special features of the Samprapti of Prameha are

- Initiating Dosha: Kapha/ Bahudrava shlesma,
- Precipitating Dosha: Vata
- Multiple Dushyas, Ten in number involving all systems of the body
- Depletion of Agni
- Emphasis on Dushyatwa of Meda and Vasa (Adipose Tissue), Ojas and Ojbala

In recent years the conventional western medicine has started putting due emphasis to lipid metabolism (Medas) and

immune status (Ojas) in the pathogenesis of Diabetes mellitus on similar lines as conceived in Ayurveda thousands of years ago. It is rivaling to notice the emerging significance of the clinical entities of metabolic syndrome, pre-Diabetes and Diabetes Mellitus Type II in a sequence continuum. Metabolic syndrome is caused by genetic predisposition and unwholesome lifestyle precipitating with central Obesity, increased release of TNF alpha leading in turn to Adeponectin depletion and Insulin resistance and ultimately leading to pre-Diabetes and then to Diabetes mellitus Type II, besides a range of cardiovascular disturbances. It seems metabolic syndrome and pre-Diabetes, which are the precursors of Diabetes mellitus Type II are the appropriate stages of Kriyakala which need to be detected timely and to be managed by Ayurvedic approach to stop the further progression of the pathology. Late stages of Diabetes may not be suitable for classical Ayurvedic treatment. Thus critical revive of the ancient classical Ayurvedic literature reveals that the classical knowledge of etiopathogenesis of Diabetes mellitus was fairly advanced. The Meda and Oja bala seem to play the role in this disease. The sheet anchor in the management of Diabetes should be lifestyle management, dietary restrictions and the use of immune-support with Rasayana therapy besides other forms of the same treatment. The present communication will

Diet Plan

Table 1: Daily requirement of Energy

Diabetes patients	Energy
Male	1800
Female	1600 ¹

Table 2: Carbohydrates and its percent in foods and its intake

Per cent of carbohydrates in food	Food	Quantity for DM Patients
Less	Vegetables, leafy vegetable, buttermilk without simple soda, as cream ,lemon water,	Unlimited
Medium	Pulses, cereals, coconut water, watermelon, grapes , fig jamun, papaya, pomegranate, orange, sweet lime	Limited
More	Potato, Suran, Sweet potato, tubers and roots, pasty vegetables, banana, jackfruit, mango, etc.	Less in quantity
More than	Sugar, jaggery, ice-cream, chocolates, candy, bakery products. Dry fruits. ²	Either restricted or less

Table 3: Common food consumption

Food particles	Quantity	Weight in g's
Vegetables:		
Pasty vegetable:		
Potato	½ bowl	50
Suran	2/3 bowl	60
Sweet potato	Sprouts	40
Shnigada floor	2 Tea spoon	16
Other vegetable		
Nut	2/3 bowl	60
Green peas	2/3 bowl	60
Kidney bean	2/3 bowl	60
Sprouts	2/3 bowl	60
Cob	1/3 bowl	50
Wet corn	½ bowl	50
Fresh fruits		
Pineapple	1/1 bowl	100
Fig (big)	1	50
Mango	½	60
Sweet lime	1	150
Watermelon/muskmelon	2 bowl	300
Cashew nut (big)	2/1/2	90/150
Banana	1	40/50
Chikoo	1	40/50
Jamun	10	00
Grapes	12	75
Peach,	1/1	120
Apple	1/1	80
Custer dapple	1/1	50
Strawberry	1/3	100
Dry fruits		
Date (without seed))	5/2	Without seed 30 / with seed 15
Kharika	5/2	Without seed 30 / with seed 15
Apricot (without seed)	2/1/2	With seed 15/13 ³

Dincharya

Health is got from the sun So. Diabetic patient should get up early in the morning Because of excess swedpravritti diabetic geriatric patients must have abhyang, udvartan and daily bath. Diet plan is very essential for geriatric diabetics⁴.

Table 4: Dincharya plan

Daily Upakarma	Usefulness	Reason
Get up time	The Brahma Muhurtam or a little later	As the air is clear and the cosmos is charged with energy.
Vegoudirana	You need to empty your bowels on time	toxins from the waste products intended for elimination
Dantadhavana	brushing one's teeth with an Ayurvedic tooth powder	It brings about freshness, take away bad odour and coating on teeth.
Jivhanirlekhana	Another essential daily activity. This helps get rid of ama deposited on the tongue	This helps get rid of ama deposited on the tongue
Gandusha	Liquids are used	Gargling leads to tastelessness
Nasya (pratimarshya)	Anu tailam	will keep you free from headaches and sinus problems
Abhyanga	self-massage with oil	nourishes the skin and helps revitalize organs
Udvarthana	Massage with different herbs	Relief of blood stasis, carrying away morbid products
Bath	Daily with lukewarm water	It is good for heart and purifying all organs.
Diet / Ahar	A simple prescription being that you do not eat the next meal before the earlier meal has been digested. You eat only enough to half fill your stomach. Your last meal should be between 6:30 pm and 7:00 pm to be followed by light exercise	

Life Style Modification

Stop Smoking

Smoking has effects on a healthy person that can be devastating, and these effects can be even worse for the diabetic. Smoking increases your cholesterol levels, and constricts blood vessels. Smoking will increase your number of colds and respiratory infections, and diabetics will experience an increased frequency of nerve and kidney disease, as well as an increased risk for limited joint mobility. Smoking increases your blood sugar level and blood pressure, and can lead to impotence. Smoking can directly increase your risk of heart attack or stroke⁵.

Body Mass Index Calculator

Discipline

It is helpful to establish regular schedules for different aspects of your lifestyle so that your body can respond in a routine and predictable way to help you maintain a healthy equilibrium. This goes for sleep, meals, work and exercise. You should try to maintain a regular schedule to provide peace and relaxation in your life- rushing around to meet the schedules is not particularly productive toward reducing stress. With the knowledge of what kind of natural schedules you can achieve. You should be able to relax into a healthy lifestyle that gives your body the best chance to respond to the everyday stressors that we can't avoid⁶.

Diabetes and Sleep

Establishing a regular pattern of sleep can help you avoid developing Type 2 Diabetes. If you are spending late hours performing stressful tasks; your metabolism responds by producing stress hormones such as cortisol. Excess cortisol has been linked to an increase in insulin resistance. This may be an effect from disturbing the immune system. For more information about how a healthy immune system is essential for diabetics. Sleep deprivation also directly leads to elevated glucose levels. This may be a response to your body's perception that you need more energy in response to a stressful situation. Further research has shown that sleep deprivation reduces levels of an appetite-suppressing hormone known as leptin, and boosts the level of ghrelin, an appetite stimulant. This situation is exactly the opposite that a diabetic or pre-diabetic would desire. Most adults feel "rested" after about 7 or 8 hours of uninterrupted sleep. If you are able to establish a regular pattern of sleep, you can avoid or diminish the stresses of sleep deprivation⁷.

Establish Regular Mealtimes and Meals

What you eat certainly has a great effect on your glucose levels. Did you know that it is also easier for your body to deal with changes in glucose when those changes are more predictable? If you can keep a steady, consistent schedule of meals, your body may be better prepared to buffer against excessive glucose levels. Just as a regular bedtime and waking hour are less stressful on your system, so are regular mealtimes. Another strategy that helps prepare your body for a daily routine is leveling, or "evening-out" the amount of carbohydrates you have at each meal. When you ingest the same glucose load (GL) at the same time every day, there are no "surprises" for your metabolism at mealtimes. The same advice goes for snacks. If you can establish a regular schedule of snacks, and aim for approximately the same amount of carbohydrates at each snack time, your body is better able to buffer the changes in blood glucose. If you have to have sweets, the American Diabetes Association has

approved four different artificial sweeteners: Saccharin (Sweeten Low), Aspartame (Nutra Sweet, Equal), acesulfame potassium (Sun nets), and Sucralose (Spendo). However, don't forget that some foods taste sweeter than you would expect. Most fruits, such as bananas, apples, or strawberries contain only about 15 - 30 g of carbohydrate per serving⁸.

Information of healthy diet

Have you ever considered a vegetarian lifestyle? Vegetarians have the benefit of lower fat and cholesterol in their diet, along with typically consuming more fiber than an omnivorous person. You can be as dedicated as a vegan, who eats nothing from animals, including milk and eggs. Or you can be less strict and indulge in the occasional piece of chicken or fish. Either way, increasing the amount of vegetables in your diet is a good start toward better health. Sometimes a midnight snack is too hard to resist. Unfortunately, this is not generally recommended for the diabetic, especially if the snack is high in carbohydrate. If you find yourself eating late at night because of low blood sugar, you should consult your physician about adjusting your medication. To speak with one of our specialists: Another negative effect of late-night snacks is that they may stimulate you to stay up later, and deprive you of essential sleep. Do you see how your lifestyle choices can have multiple negative or positive effect, we will help you integrate the elements of your lifestyle to give you the best chances to lead a healthy and productive lifestyle. You must also remember to match your medications to your meals. Taking medications on an empty stomach can cause hypoglycemia.

Relaxation Therapies

We believe that establishing a healthy lifestyle through careful scheduling of essential daily activities should be a source of peace and relation, another form of stress. As you implement the lifestyle changes that will help your body establish a healthy equilibrium, you will start to reap the benefits of a healthier existence. We can counsel you on an exercise and relaxation program that will help you integrate all aspects of your lifestyle to provide the healthiest conditions. One relaxation method that we use is called Immuno-Imagery. This active form of meditation can help you train your mind and body to interact with helpful stimuli other form of relaxation therapies including yoga and water exercises. Physical and mental relaxation can be achieved in many different ways. We will counsel and discuss with you the many different options that you have to achieve wellness and a balanced equilibrium⁹.

Behavior Modification

The excuses have to stop. Your feet and your nervous, circulation, and renal systems — depend on it. The necessary lifestyle change to live longer and more healthfully¹⁰.

What Is Dangerous About Type II Diabetes?

"Diabetes is a disease that damages the lining of your blood vessels. Because it's a small-vessel disease, patients with Diabetes are at high risk for problems involving their eyes, feet, skin, heart and kidney "Diabetes is a disease that requires a tremendous amount of risk factor modification. You're talking about **metabolic syndrome** - obesity, Diabetes, high blood pressure, high blood sugar, hyperlipidemia—fats, cholesterol—and poor management of all that. Patients with Diabetes often have difficulty

controlling their diets, which results in a complex series of problems that affect multiple systems. High-fat, high-sugar diets, coupled with sedentary lifestyles, often raise cholesterol and glucose levels and increases blood pressure, increasing the risk for heart disease, stroke and a host of other problems. "As patients get older, they tend to have a lot of dietary indiscretions. Eating a lot of unhealthy foods may be fine when you're 17, says, "but you're not going to be able to do that forever." Many of the side effects of a poor diet, such as poor circulation and neuropathy can be reversed if people just tighten control of their diets. For the diabetic, an unhealthy diet causes weight gain, which often makes it difficult to exercise. Without exerting, it becomes even easier to gain more weight. As people with Diabetes become obese, "the fat becomes an endocrine organ. It's not that they're not producing insulin, but the insulin isn't as effective. People with Diabetes have to change the way they eat to avoid foot problems, obesity, hyper-lipidemia, and hypertension.

What Lifestyle Changes

Suggestions for healthier living with Type II Diabetes include

Get an annual physical exam with your primary physician

- Or more frequently, if recommended

Get an annual foot exam with a podiatrist

- Or more frequently, if recommended

Make healthy food choices

- Eat more fruits and vegetables
- Choose lower-fat meats, such as chicken and turkey
- Avoid fried foods

Maintain a healthy body weight

- Easier to exercise
- Easier for your body respond to insulin
- Lowers your risk of heart disease and stroke

Maintain a healthy blood pressure

- Lowers your risk of damage to other organs
- Lowers your risk of heart disease and stroke

Maintain a healthy cholesterol level

- Lowers your risk of heart disease and stroke
- Helps prevent circulation problems, which can cause foot ulcers

Get regular exercise

- Helps control your weight
- Centers for Disease Control recommends at least 30 minutes of exercise 5 days a week

Don't smoke

- Lowers your risk of heart, nerve and kidney disease
- Easier for your body to respond to insulin

"Our focus is on prevention. We don't want to wait until you have a disastrous complication. This is really bad because it stinks.' Get control of your sugar, weight, diet and prevent problems before they start. "Many of the side effects of a poor diet, such as poor circulation and neuropathy [the loss of

sensation in the feet] can be reversed if people just tighten control of their diets.

Music therapy

Therapeutic sound and healing music stimulates the "Beta cell" activity in the organ and ensure normality over a period in all aspects. In emotional situations, blood sugar level is often affected. Therapeutic sound and healing music helps to present the quality of neuron transmitters- epinephrine in a subtle manner. Diabetes is mainly a result of stress and music is known to be a great stress buster. Therapeutic sounds and healing music dramatically the stress and brings about a state of peace. This music vibration stimulates the nerve and beta cells activities. Research has shown that healing music sound therapy reduces anxiety, pain sensation, pain distress and nerve healing. While in some cases these sounds may seem medically enhanced, this international effort is part of a therapy-led research that has been effectively tested with positive result. Rag-Komal, Rag-Puriya Rag-Marava, Rag-Dhanashree, Rag-kafi is listened in evening time. There benefit: happiness, celebration, harmony, integration, good sleep.

Asan

Asanas are not only a form of physical exercise but also the method of gaining the perfect mental and physical relaxation. Yogasana influence various internal organs and make them functionally more efficient. Yogasan, Pashimottasan, Vajrasan Mandukasan, Ardhamasthendriyasan¹¹

Role of Rasayana in Diabetes

Ancient Ayurvedic physicians had developed certain dietary and therapeutic measures to serest/delay ageing and rejuvenating whole functional dynamics of the body system. This revitalization and rejuvenation is known as the 'Rasayana chikitsa' (rejuvenation therapy). Rasayana is one of the eight clinical specialties of classical Ayurveda. Rasayana replenish the vital fluids of our body, thus keeping us away from diseases. The Rasayana therapy enhance the qualities of rasa, enriches it with nutrients so one can attains longevity, memory, intelligence, freedom from disorder, youthfulness, excellence of luster, complexion and voice, optimum development of physique and sense organs, mastery over phonetics and brilliance. Taking Rasayana is helpful to increase the immunity of the person to keep him away from disease and also reverses the disease process and prevents the re-occurrence. The Rasayana are rejuvenators, nutritional supplements and possess strong antioxidant activity. They also have antagonistic actions on the oxidative stressors, which give rise to the formation of different free radicals¹².

CONCLUSION

The above study concluded that at the age of 35 everyone should be aware about their day to day lifestyle modification. Lifestyle modification can improve positive health. We can achieve health and longevity with proper lifestyle. It can prevent life threatening disorders and also process of ageing. Hereditary Diabetes can be avoided by implementation of such lifestyle. Complication of Diabetes can also avoid by following this lifestyle management plan as per Ayurveda.

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