

ROLE OF DIET AND LIFESTYLE IN THE MANAGEMENT OF MADHUMEHA (DIABETES MELLITUS)

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ABSTRACT

Today's modern time dominated by disorders of the lifestyle, madhumeha has gigantic disorder in this era and becoming the world's largest silent killer. So in this era Ayurveda is the solution of all these gigantic disease.

All the people shifted from ayurvedic medicine because there is no side effects. It is the oldest system of our Indian medicine. Madhumeha described by acharya charaka and sushruta. Principal of ritucharya, dincharya, pathya, apathya, sadvritta suggestion for balanced lifestyle and diet because madhumeha is life style disorder.

Unhealthy life style is result of madhumeha because it increased madhumeha in 80% of the cases. Madhumeha is the type of vataj prameha. It is caused by consumption of snigdha and guru ahara, lack of exercise, dairy products and the food induces kapha dosha.

Modern medicine has limits but in ayurveda can help patient regulate blood glucose and change their life style and habits.

keywords: *Vihara, Diabetes Mellitus, madhumeha, prevention varadhi kwatha, diet, lifestyle*

Introduction :

Amongst the many dreadful conditions arising because of modern-day living, Madhumeha is a giant disease considered as one of the archenemies of the human kind caused by improper diet and lifestyle. It is often referred to as a "silent killer." Diabetes and its complications pose a major threat to public health resources throughout the world. Looking at its gravity, the World Health Organization has taken up a close vigilance and survey about this problem the world wide.

Madhumeha is a major non communicable diseases with increasing prevalences at global level and poorly controlled diabetes leads to several complications, including heart disease, stroke and death.

Ayurveda has much broader principals of adapting the diet with due emphasis on individual factors including the prakriti, dosha, agnibala, desa, kala and satmaya of the patient. Since a long time ayurveda has been emphasizing more on the importance of diet and life style in the maintenance of health.

The Who's statement on primary health care program states that there is a collective failure to deliver in line with these values which is painful and deserves our greatest attention. And there is an inability of health services to deliver the level of national coverage that meets the stated demand and changing needs. This scientific holistic work inspired from Ayurveda with a special focus on diet and lifestyle can seriously contribute into the DM management and primary health care program.

ETIOLOGY

Hereditary and dietetic two factors are generally responsible for causing the disease madhumeha and the patients are classified accordingly as sahaja madhumehi and apathyanimittaja madhumehi.

Excessive sleep, milk, sweets, fast food, laziness, sleepiness unhealthy life style and kapha aggravating factors are causes the madhumeha.

Sign & symptoms :- Symptoms vary from person to person and early stages of diabetes have very few symptoms so You may not know you have the disease. But damage may already be happening to your eyes and your kidneys, and your cardiovascular system. Common symptoms include this one:

- Extreme hunger.
- Extreme thirst.
- Frequent urination.
- Unexplained weight loss.
- Fatigue or drowsiness.
- Blurry vision.
- Slow-healing wounds, sores, or bruises.
- Dry, itchy skin.
- Tingling or numbness in the hands or feet.
- Frequent or recurring skin, gum, bladder, or vaginal **yeast infections**.

The People who have type 2 diabetes also may show signs of **insulin resistance**. This includes darkening skin around the neck or in the armpits, **high blood pressure, cholesterol** problems, yeast infections, and skipped or absent periods in teen girls and women. If blood sugars are extremely high, people can develop diabetic ketoacidosis (DKA). And This is a very dangerous complication of uncontrolled diabetes. People with DKA might have:

- Nausea or vomiting more than once.
- Deeper, faster breathing.
- The smell of nail polish remover coming from your breath.
- Weakness, drowsiness, trembling, confusion, or dizziness.
- Uncoordinated muscle movement.

Cause of MADHUMEHA

- *Type 1**--In type 1 diabetes, your body doesn't make insulin. This is because the immune system attacks and destroys the cells in the pancreas that make the insulin. Doctors aren't sure why this happens. You have a greater risk of type 1 diabetes if one of your parents or one of your siblings has it.
- *Type 2**-- When you eat, your body changes most of the food you digest into glucose (a form of sugar). A hormone called insulin allows this glucose to enter all the cells of your body. There it is used for energy. Insulin is produced by the pancreas. In someone who has type 2 diabetes, the pancreas doesn't make enough insulin or the body's cells can't use insulin properly (called insulin resistance). This causes glucose to build up in your blood instead of moving into the cells. Too much glucose in the blood can lead to serious health problems that damage the blood vessels and nerves, heart, eyes, and kidneys.

Certain risk factors for type 2 diabetes include:

Weight, Obesity

is the single most important risk factor for type 2 diabetes. The more overweight you are, the more resistant your body is to insulin. To figure out if you're overweight, talk to your doctor. A healthy, low-fat diet and regular exercise can help you lose weight gradually and keep it off.

- **Age.** The risk for type 2 diabetes increases with age, especially after you're 45 years old. Although you can't change your age, you can work on other risk factors to reduce your risk.
- **Family history.** You can't change your family history, but it's still important for you and your doctor to know if diabetes runs in your family. So Your risk for diabetes is higher if your mother, father, or sibling has diabetes. Tell your doctor if anyone in your family has diabetes.
- **Pregnancy. Gestational diabetes** a kind of diabetes that happens only during pregnancy. Although gestational diabetes goes away after pregnancy, about half of women who had gestational diabetes are diagnosed with type 2 diabetes within 15 years. Even if they don't have gestational diabetes, women who give birth to babies who weigh 9 pounds or more are more likely to develop type 2 diabetes later in life. And The American Academy of Family Physicians (AAFP) recommends screening for gestational diabetes in pregnant women after the 24th week of pregnancy. The AAFP believes there is not enough evidence to determine the benefit and harm of screening for gestational diabetes in pregnant women before the 24th week of pregnancy.
- **Polycystic ovary syndrome (PCOS).** This is a condition that occurs when an imbalance of hormone levels in a woman's body causes cysts to form on the ovaries. The Women who have PCOS are at an increased risk of developing type 2 diabetes.

CLASSIFICATION

1. MADHUMEHA CLASSIFIED INTO SAHAJA OR APATHA NIMITTAJA
2. ACC. TO PHYSICAL MANAGEMENT
 - . lean diabetic- apatharpana uthaja
 - . obese diabetic- santharpana uthaja
3. ACC. TO DOSHIC THREE TYPE OF MADHUMEHA
 - . vataj-totally four
 - . pittaj – totally six
 - . kaphaj- totally ten

CLASSIFICATION ACC. MORDEN

TYPE 1- type 1 is an autoimmune disease causing destruction of beta- cell, usually found in childrens, teenagers, young adults

TYPE2- it is most common and commonly seen in adults but can occur in childhood also.

2. gestational –is carbohydrate intolerance resulting in hyper glycaemia. First seen during pregnancy.
3. other types- genetic defects of the beta – cell and insulin action.
4. genetic syndromes
5. infection
6. excess amount of regular hormones
7. autoimmune disorders.

MANAGEMENT-in general type 1 diabetes mellitus patients are divided into two groups to have insulin medication as well as diet which can increase dhatu in the body.

In type 2

diabetic obese patient with optimal body strength, having intense increase of dosha, samshadhan [purification] of the advocated.

Herbal medication helpful in madhumeha-

Musta [Cyperus rotundus]

Daruharidra [Berberis aristata]

Arjuna [Terminalia arjuna]

Guduchi [Tinospora cordifolia]

Following preparation may be used judiciously in patient of pramehamadhumeha for effective management .

Ghirta and taila- trikantakdya sneha, dadimadhya ghirta triphala.

Asava- arista- lodhra asav madhav asana

Leha[paste]- kasha avleha

Udaka- sarodaka ,kushodaka

Vati- chandraprabhavati, indravati, arogyavardhini vati, gokshuradi vati

Churna – eladi churna triphaladi churna

DIABETES CAN BE CONTRALLED BY GIVING COMPRENSIVE ATTENTION TO THREE ASPECTS .

Ahara[diet]

Vihara[exercise]

Aushadha[medicine]

Healty eating is comerstone of healthy living –with or without diabetes row food affect your blood sugar level .this is not only type of food you eat but also how much you eat and the combination of food typee you eat.

CEREALS- yava-barley [chenopodium album], godhooma-wheat, kodrava, bajara.

PULSES-mainly beans –mudga[green gram], chanaka[Bengal gram]

VEGETABLES-thikha shakas methi, [trigonella foenum-gracum], nimbi [azadirachta indica]

EXERCISE[YOGA]

physical acitivity another important oart of diabetes management plan regular physical acitivity helps your body use insuln mor effectively. when you exercise your muscles can use sugar [glucose] for energy.

Talk to you doctor about exercise plan .you asked your doctor about what types of exercise is appropriate for you.

If you been inactive for a long time your doctor may want to check your overall health advising you they recommend the right balance of arobic muscles strength and aerobic exercise.

The common aasana which can be very effect in diabetes are ,padmasana, shalabhasan, mayurasan dhaurasan.

MEDICATION-

Other diabetes medication and insulin are designed to lower blood sugar levelthe effectiveness of these medication depend on timing and size of dose.

Store insulin properly- insulin is especially sensitive to extreme n temperature.

Stress- if you are stressed the hormones of your body produce in response to prolonged stress may rise in blood sugar level.

INVESTIGATION

1. Blood glucose
2. Urine test
3. Oral glucose tolerance test
4. Liver biochemistry
5. HBAIC

SAMPRAPTIGHATAK

Dosha- vata, pitta, kapha

Dushya- meda, mansa, rakta, vasa, majja, rasa, ojas

Strotas- mootravaha

Vyaktasthana- mootravahs strotas

Conclusion :

Management of DM requires the commitment and coordinated efforts of the veterinary healthcare team and the pet-owner client. For this reason, proactive client education is an essential component of a DM treatment plan. Client education includes instruction on insulin administration, signs of favorable clinical response or lack thereof, measuring BG levels, and the importance of non-insulin therapies, including dietary management.

Diabetes mellitus has a multifactorial etiology, requiring practitioners to consider and assess the possible roles of the patient's body condition score, diet, concurrent diseases, medications, neutering status, and genetic predisposition. When the relevant DM-causative factors have been identified, a well-defined, case-specific treatment plan can be developed with a this reasonable expectation for control, and in the case of cats, a chance for remission and this

The distinction between clinical and subclinical DM and transient hyperglycemia is an important factor in the approach to treatment. Insulin therapy is reserved for patients with clinical DM. Patients at risk for developing DM should be managed using monitoring strategies and non-insulin modalities, with an emphasis on dietary management. Diagnosis of DM focuses on a combination of predisposing factors, characteristic clinical signs, and laboratory diagnostic values outside the reference ranges. These factors should be considered in their totality rather than as isolated indicators.

The mainstay of treatment for clinical DM in dogs and cats is insulin along with dietary a modification. Goals include controlling BG below the renal threshold for as much of a 24 hr period as possible, which will improve clinical signs of DM, and avoiding clinically significant hypoglycemia. There are many insulin formulations currently commercially available, two of which are approved for veterinary use in dogs and



cats: lente (Vetsulin) and PZI (ProZinc). And The choice of insulin is often based on duration of effect in the respective species. Dietary is management an essential cotherapy in clinical DM cases, although non-insulin medications may be useful adjuncts to insulin therapy.

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