Diabetes Mellitus

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Definition

Diabetes Mellitus is a permanent bodily state in which there is a derangement in carbohydrate metabolism, and sometimes also in fat and protein metabolism. It is primarily an expression of insulin deficiency in the system, although it involves more than a simple lack of insulin.

Introduction

In the normal process of digestion, sugars, starches, and other foods are changed into glucose and distributed throughout the body. The rise in blood glucose triggers the release of a hormone called insulin. Insulin allows glucose to leave the bloodstream and enter body cells, where it is used for energy or stored for future use. In diabetes the body either produces no insulin or too little insulin or cannot use the insulin. As a result, the unused glucose collects in the blood. This leads to high blood-sugar levels.

One type of diabetes (insulin-dependent, or Type I) usually becomes apparent by the age of forty. This type of diabetes can only be managed by insulin injection. The more common type of diabetes is non-insulin-dependent (Type II) and is more likely to become apparent from middle age onwards. Type II diabetes can often be managed by dietary control, although some patients may need medication or sometimes insulin injection.

Underlying primary pathologic abnormalities causes secondary diabetes. Diabetes Mellitus is the leading cause of irreversible blindness and chronic renal failure. Diabetes is found worldwide, and the incidence is increasing rapidly. Type I accounts for 10% to 15% of cases, and the age of onset is primarily childhood or adolescence. Type II accounts for 85% to 90% of cases and onset generally occurs after age 40. A small number of cases are secondary Diabetes Mellitus, and the age of onset varies according to the cause of the underlying primary pathologic condition.

People can become diabetic at any age, especially when there is a family history of diabetes and obesity.

Types of Diabetes Mellitus & Their Symptoms

There are four (4) different types of Diabetes Mellitus. They are listed and described as follows:

TYPE I: Sometimes referred to as "insulin-dependent diabetes mellitus" or "IDDM" for short or Juvenile Diabetes. This form of diabetes is the most serious. In this type of diabetes, the body's production of insulin is quite low. The reason for this occurrence is still unknown; however, what is known is that for some reason the body's defense system (immune system) attacks and destroys the insulin-producing cells in the pancreas.

The symptoms include:

- Elevated sugar in the blood,
- Elevated sugar in the urine,
- Frequent urination,
- Excessive thirst,
- Extreme hunger,
- Dramatic weight loss,
- Irritability,
- Weakness and fatigue, and
- Nausea & vomiting.

This type of diabetes is managed with insulin injections, a meal plan and exercise. This form of diabetes is also known as "juvenile diabetes" because children or young adults are most often the ones afflicted.

TYPE II: Sometimes called "non-insulin dependent mellitus" or "NIDDM". In this type of diabetes, the pancreas produces insulin but in some cases not enough to maintain normal blood sugar levels. Also, the tissues in the body may not be as sensitive to insulin.

The symptoms include: Any of the symptoms of type I, but they usually occur less suddenly and may be unnoticed or ignored. Additional symptoms of type II are:

- Recurring or hard-to-heal infections (especially infections of the skin, gums, or bladder),
- Drowsiness,
- Blurred vision,
- Tingling or numbness of the hands and feet, and
- Itching.

Treatment of Type II diabetes includes a meal plan, exercise and medication (or occasionally insulin). This type of diabetes most often occurs in people over 40.

TYPE III Gestational Diabetes: This form of diabetes can appear in pregnant women who have never exhibited any sign of high blood glucose and usually disappears after childbirth. The hormonal changes of pregnancy stress the mother's system and, in some cases, the pancreas is unable to produce sufficient insulin. Many of these women may later develop Type II diabetes within 5 to 10 years.

The Symptoms Include: Same as of those type I and type II.

Treatment for gestational diabetes can range from diet management to insulin therapy.

TYPE IV: Includes other -types of diabetes associated with genetic defects, pancreatic disease, hormonal abnormalities or side effects of drugs.

Most people with diabetes --- nine out of ten --- have Type 2 diabetes. The pancreas of people with Type 2 diabetes keeps making insulin for some time, but the body can't use it very well. Most people with Type 2 find out about their diabetes after age 30 or 40.

Diagnostic Tests

Fasting blood sugar: 140 mg/dl on two occasions

Glucose tolerance test: 200 mg/dl for 2-hour sample and one other sample after administration of 75 g of glucose

Blood insulin: Absent in type I; normal or elevated in type II

Plasma C-peptide: Absent in type I; normal or elevated in type II

Facts About Diabetes

- For every 6 diagnosed cases of diabetes, 1 of them is Type I and 5 are Type II.
- Many people with Type II diabetes have not yet been diagnosed and don't know they have diabetes.

Those people who are more at risk of getting diabetes are those with one or more of the following:

- People with diabetic relatives. Diabetes is believed to have an inherited genetic tendency.
- People who are overweight: The chance of developing Type II diabetes doubles with every 20 percent excess weight. It is believed that excess body fat prevents insulin from working properly.
- People over forty: Type II diabetes is most common in middle and old age.

Prevention of Diabetes

Below, you'll find a weight chart. If you weigh more than the weight that matches your height on the chart, tell your doctor. You can help manage your diabetes by controlling your weight, making healthy food choices, and getting regular physical activity. Some people with Type II diabetes may also need to take medicines for diabetes or insulin shots if oral medication does not help to control their diabetes.

Women (shows 20% over ideal weights)*Pounds			**Men (shows 20% over ideal weights)*Pounds**		
Height (without shoes)		Weight (without clothing)	Height (without shoes)		Weight (without clothing)
Feet	Inches		Feet	Inches	
4	9	134	5	1	157
4	10	137	5	2	160
4	11	140	5	3	162
5	0	143	5	4	165
5	1	146	5	5	168
5	2	150	5	6	172
5	3	154	5	7	175
5	4	157	5	8	179
5	5	161	5	9	182
5	6	164	5	10	186
5	7	168	5	11	190
5	8	172	6	0	194
5	9	175	6	1	199
5	10	178	6	2	203
5	11	182	6	3	203

Advice for those afflicted

- Follow your treatment plan and take medicines regularly
- Maintain a healthy diet
- Control your weight
- Exercise regularly
- Monitor your blood sugar level with regular checkups
- Do not smoke & take Alcohol
- Do Meditation to avoid stress

Maintaining a Healthy Diet

Here are some tips for making healthy eating choices:

Eat regular meals: Ask your Doctor to help you choose a meal plan. Don't skip meals.

Eat less fat: Avoid fried foods. Foods that are baked, broiled, grilled, boiled, or steamed are healthier to eat. Eat meats that have little fat. When you eat dairy products (cheese, milk, yogurt, and others) choose those that have little or no fat or cream.

Eat less sugar: You may find that eating less sugar helps you control your blood glucose level. Here are some things you can do to eat less sugar:

- Read the labels on jars, cans, and food packages before you buy them. If one of the first four ingredients listed is sucrose, dextrose, corn sweeteners, honey, high-fructose corn syrup, molasses, or powdered sugar, try to buy something with less sugar, or else use less of that food item.
- Drink sugar-free sodas and other liquids that have no added sugar in them.
- Eat fewer foods that have extra sugar, such as cookies, cakes, pastries, candy, chocolates, brownies, and sugared breakfast cereals.

Eat less salt: Eating less salt may also help you to control your blood pressure. Here are some ways to eat less salt:

- Use less salt when you prepare foods.
- Cut down on processed foods, such as foods you buy in cans and jars, pickled foods, lunchmeats ("cold cuts"), and snack foods, such as chips.
- Taste your food first before adding salt. You may not need to add any.

Alcohol and Smoking

Alcohol can cause health problems, especially for people with diabetes. It adds calories and it doesn't give your body any nutrition. Drinking alcohol may cause dangerous reactions with medicines you take. Your blood glucose can go down too low if you drink beer, wine, or liquor on an empty stomach.

Smoking cigarettes causes hundreds of thousands of deaths each year. When you have diabetes and also use tobacco, the risk of heart and blood vessel problems is even greater.

One of the best choices you can make for your health is to never start smoking - or if you smoke, quit as soon as possible.

Physical Activity

It's important to be active: Physical activity has many benefits. It can help you control your blood glucose and your weight. Physical activity can help prevent heart and circulation problems. People start feeling better when they do regular exercise.

Start with a little: If you haven't been doing any physical activity, talk to your doctor before you begin. Walking, working in the yard, and dancing are good ways to start. As you become stronger, you can add a few extra minutes to your physical activity. If you feel pain, slow down or stop and wait until it goes away. Talk to your Doctor, if the pain reoccurs.

Do some physical activities every day: It's better to brisk walk 10 or 20 minutes each day than one hour once a week.

Choose an activity you enjoy: Do an activity you really like. The more fun it is, the more likely you will do it each day. It's also good to exercise with a family member or friend.

Prevention of Complications

Diabetes should not be taken lightly. The three most common emergency complications for people with diabetes are **hypoglycemia, hyperglycemia, and ketoacidosis**. Diabetes is the leading cause of new blindness and end-stage renal disease. Chronically elevated blood glucose levels results in peripheral nerve damage, which contributes to amputation and increases the risk of myocardial infarction (heart attack). Uncontrolled diabetes during pregnancy increases the risk for fetal loss and congenital abnormalities, particularly spina bifida, a nerve tube defect present at birth that results in a gap in the bone that surrounds the spinal cord. Spina bifida is relatively common, occurring about 10 to 20 times per 1,000 births. Other complications can include eye and kidney disease, heart attack, foot infections with gangrene, stroke, and impotence.

Dealing with Hypoglycemia & Hyperglycemia

Hypoglycemia (Low Blood Sugar) is often referred to as an insulin reaction or insulin shock. It is more common in people whose diabetes is treated by injection. It can occur suddenly if you delayed a meal or ate too little, if you have had extra exercise, or if person has taken too much medication. In general, a blood glucose reading lower than 70 mg/dL is too low.

This condition must be treated quickly with sugar, sugary foods or fruit juice; otherwise, in extreme situations if left untreated, the person could become unconscious.

If a person becomes unconscious honey or syrup should be rubbed inside the person's cheek, or the person should be injected with glucagons, a hormone that raises blood sugar. When glucagon is not available, an emergency medical call should be made or the person should be taken to the nearest emergency room.

Symptoms of Hypoglycemia (low blood sugar)

* One or more symptoms may occur,

* Some people show no symptoms

- Inappropriate responses
- Confusion and inattention
- Drowsiness
- Pale complexion
- Perspiration
- Headache
- Crankiness
- Lack of coordination
- Trembling
- Sudden hunger
- Dizziness

Drinking beer, wine, or liquor may also cause low blood glucose or make it worse.

See the box below for examples of foods and liquids with this amount of carbohydrates.

Foods and Liquids for Low Blood Glucose (each item equals about 10 to 15 grams of carbohydrates)	
Food Item	Amount
Sugar Packets	2 to 3
Fruit Juice	½ cup (4 ounces)
Soda Pop (not diet)	1/2 cup (4 ounces)
Hard Candy	3 to 5 pieces
Sugar or Honey	3 teaspoons
Glucose tablets	2 to 3

Check your blood glucose again in 15 minutes. Eat another 10 to 15 grams of carbohydrates every 15 minutes until your blood glucose is above 70 mg/dL or your signs have gone away.

Eating an item on the list on the facing page will keep your glucose up for only about 30 minutes. So if your next planned meal or snack is more than 30 minutes away, you should go ahead and eat something.

Hyperglycemia (High Blood Sugar) is when a person with diabetes has high blood sugar. For most people, blood glucose levels that stay higher than 140 mg/dL (before meals) is too high.

Eating too much food, being less active than usual, or taking too little diabetes medicine is some common reasons for high blood glucose (or hyperglycemia). Your blood glucose can also go up when you're sick or under stress.

Symptoms of Hyperglycemia (high blood sugar):

- Dry mouth,
- Thirst,
- Urinating often,
- Feeling tired,
- Blurred vision,
- Loss of weight without trying.

There are usually large amounts of sugar in the urine and blood. If your glucose is very high, you may have stomach pain, feel sick to your stomach, or even throw up.

Dealing with Ketoacidosis (diabetic coma): When a person with Diabetes begins to have very high blood sugar (Hyperglycemia) there is a danger of diabetic ketoacidosis (blood sugar is above 240 mg/dL). If left untreated, the body does not have enough insulin to use the high amounts of sugar and so the person's body begins to use the energy from its own stored fats. As these fats are broken down, acids called "ketones" are formed in the body.

If too many ketones are formed the person with Diabetes can fall into a coma. This condition can be fatal. A diabetic coma mostly occurs with Type I diabetes. In order for that dangerous level of ketones to develop it usually takes several hours or days.

The dangerous end result can be averted if a person with Diabetes pays attention to the early symptoms, which often are the following:

- Extreme thirst
- Drowsiness, lethargy
- Sugar in urine
- Dry, hot skin
- Lack of appetite
- High levels of sugar and ketones in the blood

- Fruity, sweet or wine-like odor on breath
- Heavy, labored breathing
- Eventual stupor or unconsciousness

Dealing with Insulin Side effects:

An insulin reaction (hypoglycemia) is an inherent risk that may occur because of an error in insulin dosage, a missed meal, unplanned exercise (patients are usually instructed to reduce their insulin dose or to increase their carbohydrate intake before planned exercise), or without apparent cause. Patients should take measures to check low blood sugar level as discussed above.

Local allergic reactions (at the site of insulin injections) are less common with purified porcine and human insulin's. There is often immediate pain and burning, followed after several hours by local erythema, pruritus, and induration, the latter sometimes persisting for days. Most reactions spontaneously disappear after weeks of continued insulin injection and require no specific treatment, although anti-allergic medicines are sometimes required.

Pregnancy, Diabetes, and Women's Health

Becoming Pregnant When You Have Diabetes: Women with diabetes can have healthy babies, but it takes planning ahead and effort. Pregnancy can make both high and low blood glucose levels happen more often. It can make diabetic eye disease and diabetic kidney disease worse. High glucose levels during pregnancy are dangerous for the baby, too.

Protecting Your Baby and Yourself: Keeping your glucose levels near normal before and during pregnancy can help protect you and your baby. That's why it's so important to plan your pregnancies ahead of time. If you want to have a baby, discuss it with your physician.

Get a complete check of your eyes and kidneys before you try to become pregnant. Don't smoke, drink alcohol, or use drugs --- doing these things can harm you and your baby.

Having Diabetes During Pregnancy: Some women have diabetes only when they're pregnant. This condition, which is called gestational diabetes, can be controlled just like other kinds of diabetes. Glucose control is the key. Your physician can help you take charge of gestational diabetes.

Complications: Some women with diabetes may have special problems, such as bladder infections. If you have an infection, it needs to be treated right away. Consult your doctor immediately.

Some women get yeast infections in their vagina, especially when their blood glucose is high. A sign of a yeast infection may be itching in the vagina. If you notice vaginal itching, inform your doctor. Some women with diabetes may have trouble with sexual function. Discomfort caused by vaginal itching or dryness can be treated with medicines.

Is there a Cure for Diabetes?

A number of studies have shown that regular physical activity and less tension can significantly reduce the risk of developing Type II diabetes. Researchers are making progress in identifying the exact genetics and "triggers" that predispose some individuals to develop type I diabetes, but a cure, till date remains elusive.

Diabetic Treatment

The treatment's first aim is to keep blood glucose near normal levels at all times. Training in self-management is integral to the treatment of diabetes. Treatment must be individualized and must address medical, psychosocial, and lifestyle issues.

Treatment of type I diabetes: Lack of insulin production by the pancreas makes type I diabetes particularly difficult to control. Treatment requires a strict regimen that typically includes a carefully calculated diet, planned physical activity, home blood glucose testing, and regular medication of multiple daily insulin injections.

Treatment of type II diabetes: Treatment typically includes diet control, exercise, home blood glucose testing, and in some cases, oral medication with or without insulin. Approximately 40% of people with type II diabetes may require insulin injections.

Self Testing For Diabetics

Self-testing blood sugar is an easy and effective way to perform blood glucose monitoring. Most of these tests can be done quickly by finger stick (Auto-Injector). The results can be used to adjust meals, activity, and insulin dosing to keep glucose levels in a normal range. Automatic glucose monitoring devices are available that will provide a glucose reading, eliminating the need to compare the color of your test strip with that of a standardized color chart. Home urine self-testing for ketones and glucose can be done to assist in the early detection of diabetic ketoacidosis. Ketones should be tested if the blood sugar is over 250 mg/dl, a dose of insulin has been missed, or if the diabetic patient is ill (e.g. vomiting, nausea, cough, etc.).

*** NOTE ***

There are several allopathic medicines that can interfere with the regulation of diabetes. Steroid medications (i.e. Prednisone and Medrol) can increase blood sugar levels, making it very difficult to control blood sugar in the diabetic patient. Those patients who are "borderline" diabetics have great difficulty taking these medications. Beta-blocker antihypertensive medications can also cause serious complications for the diabetic patient and should be avoided.

DO NOT CHANGE ANY OF YOUR MEDICATIONS WITHOUT FIRST CONSULTING YOUR PHYSICIAN.

Homoeopathic Treatment

Homoeopathic Medicines if taken regularly can avert the use of Insulin and minimize the oral diabetic drugs in diabetic Type II. In fresh cases with simple homoeopathic medicines one is able to control successfully the blood sugar level to a normal range. In majority of cases Homoeopathy prevents the patients to become Insulin dependent. The most useful homoeopathic medicines are given as under:

Syzygium Jambolanum Q, 1M: A most useful remedy in diabetes mellitus. No other remedy causes in so marked degree the diminution and disappearance of sugar in the urine. Great thirst, weakness, emaciation. Very large amounts of urine, specific gravity high. Diabetic ulceration.

Cephandrica Q, 1M: Almost specific in Diabetes.

Gymnema Sy (GUMER) Q, 1M: Almost specific in Diabetes Ars.Brom: Diabetes is all greatly influenced by this preparation

Acid Lactic 30C: Diabetes. Large quantities passed, frequently. Rheumatic pains associated with Diabetes.

Phloridzin 1M: A glucosidal principle obtained form the bark of the root of the apple and other fruit trees. Diabetes and fatty degeneration of the liver. It compels the secretary epithelium of the kidney to break down serum albumin into sugar. This is very useful in ***Ketoacidosis***.

Okoubaka Q, 1M: Unstable glycemia.

Phos.Acid Q, 1M: Diabetes. Micturition proceeded by anxiety and followed by burning. Frequent urination at night.

Saccharum Officinale: Almost specific in Diabetes

Uranium Nit: Diabetes. Emaciation and tympanites. Burning in urethra, with very acid urine.

In Insulin dependent patients and for its side effects, Insulin in Homoeopathic potency gives very good results.

Constitutional remedies like Lycopodium, Natrum Sulph, Carcinocin & Sulphur plays also significant role in the treatment of Diabetes Type II.

For Juvenile Diabetes: Pancreatin 30C, Phosphorous 30C or higher, Iris V 30C or higher, Crategus Ox Q, Natrum Sulph, Carcinocin 1M or high & Lycopodium 1M or high.

For Diabetes Insipidus: Uranium Nit 4X, Arg. Met. 30C or higher, Acid Phos Q or higher.

Vibronic Medicines:***

Diabetes 30: It has the properties of Sep-8 & 9, Alfalfa, Iris Ves, Natrum sulph, Syzygium, Urtica Uren & ATCH

Tension 10MM: It has the properties of Hysteria , Stress,Fear,Depression, Heart Balance, Resue plus & walnut.

SEP-8: It has the properties of Gluagon, Insulin, Islets of langerhans, Pancreatin

SEP-9: It has the properties of Duedenum, Pancreas, Pancreatic juice, Vagus Nerve.

***** These are neither complex medicines nor patent formulations. These are Single medicines and prepared as single medcine/s only.**

Since 3 years I am working on the project of Diabetes Mellitus and these medicines are able to control Blood Sugar immediately in fresh cases and in drug dependent including insulin, these medicines will be able to reduce the drug as well as Insulin dosage.

WARNING

"UNDER NO CIRCUMSTANCES ONE SHOULD TAKE THESE MEDICINES BY ITSELF ". The above given details about the medicines for treatment of Diabetes should be taken under the proper guidance of a qualified & registered Homoeopathic Physician.

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