Diabetes Mellitus 糖尿病(英文)

Definition of DM

DM is a group of diseases characterized by hyperglycemia (elevated blood glucose) resulting from defects in insulin secretion, insulin action, or both.

Diagnostic criteria for DM

Symptoms include:

1. Thirst, increased daily urine amount, weight loss, and causal plasma glucose greater than 200 mg/ dL

2. With empty stomach more than 8 hours, the plasma glucose level exceeds 126 mg/dL

3. 2 hours after taking the 75-g oral glucose test, the plasma glucose level exceeds 200 mg/ dL.

Note: when any aforementioned symptom is fulfilled, it is deemed diabetes mellitus.

DM Classification

1. Type 1 DM : pancreatic β cell destruction and insulin deficiency.

2. Type 2 DM : insulin resistance.

3. Other specific types: resulting from pancreatitis, endocrine disorders, or drug

4. Gestational DM : hyperglycemia with first recognition during pregnancy.

Acute complications of DM

1. Hypoglycemia: Low level glucose is induced by medication overdose, insufficient food intake, or excessive work-out.

2. Ketpacidosis: excessive ketone accumulation in the body results distinct gastrointestinal symptoms and acute short breath.

3. Hyperglycemic hyperosmolar syndrome: extremely high hyperglycemia with combination of dehydration and consciousness disturbance.

Chronic complications of DM

1. Retinopathy : vision blurring or loss of vision.

2. Neuropathy : numbed and painful limbs, postural dizziness, constipation or diarrhea, and impotence.

3. Nephropathy : protein in urine, edema, hypertension, and renal failure.

4. Cardiovascular disease : atherosclerosis incurs stoke, myocardial infarction, lower limb circulation disturbance.

5. Foot ailment : ulceration, necrosis, gangrene, infection, and amputation.

DM Treatment

1. Diet : adequate calories and balanced nutrients.

2. Exercise : 30-minute to an hour daily exercise with moderate intensity.

3. Drugs : oral medication or insulin injection.

4. Comprehensive health education.

5. Regular and normal life style.

Goals for DM control

1. Plasma glucose before mea l : 70 - 130 mg/dL.

2. Plasma glucose after meal : less than 180 mg/dL.

3. HbA1c : lower than 7.0 %.