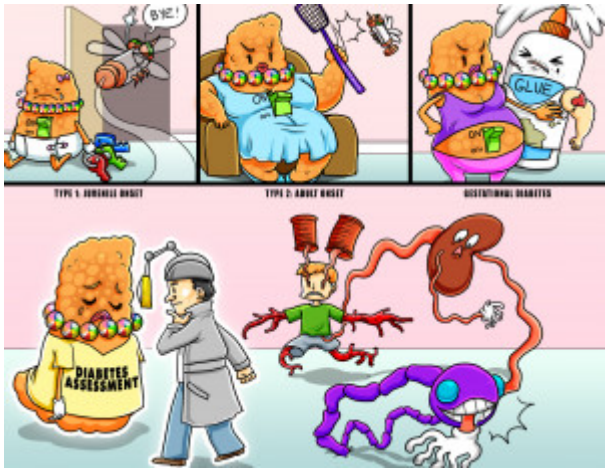
Diabetes Assessment

Diabetes mellitus is a chronic multisystem endocrine disorder, which results in elevated blood sugar (hyperglycemia). It is classified as follows – Type 1 (autoimmune; idiopathic) and Type 2 (insulin resistance), and gestational diabetes (GDM- glucose intolerance during pregnancy).



PLAY PICMONIC

Assessment Type 1

Juvenile Onset
Child On-switch
Type 1 diabetes, formerly known as juvenile-onset diabetes or insulin-dependent diabetes, is more common in young people but can occur at any age. It accounts for about 5% of all people with diabetes with signs and symptoms usually occurring abruptly, but the disease process may be present for several years before proper diagnosis.

Absent Insulin Production
Insect-syringe Leaving
Type 1 diabetes is an immune-mediated disease caused by autoimmune destruction of the pancreatic beta cells, which is the site of insulin production. This results in the pancreas no longer being able to produce sufficient amounts of insulin to maintain normal glucose. Once this occurs, the onset of symptoms is typically rapid and patients will require insulin injections to sustain life.

Ketosis Prone
Ketone-keys
Diabetic ketoacidosis (DKA) is a medical emergency resulting from a shortage of insulin in which the body switches to burning fatty acids and producing acidic ketone bodies. Those with type 1 diabetes are more prone to experiencing ketosis, especially at onset or during insulin deficiency.

Assessment Type 2

Adult Onset
Adult On-switch
Type 2 diabetes, formerly known as adult-onset diabetes or non-insulin-dependent diabetes, is usually seen in those age 35 or older, but can occur at any age with incidence increasing in children. It accounts for 90-95% of patients diagnosed with diabetes.

Insulin Resistance
Insect-syringe swatted by Resistance
The primary defect in those with type 2 diabetes is insulin resistance. The pancreas continues to produce insulin; however, it is either insufficient for the body’s needs or is poorly used by the tissues.

Obesity
Obese
Obesity is a major risk for developing type 2 diabetes, especially abdominal and visceral adipose tissue. Other risk factors include lack of exercise, increased age, and family history.

Gestational Diabetes

Onset During Pregnancy

Pregnancy On-switch

Gestational diabetes develops during pregnancy and occurs in approximately 2-10% of expecting mothers. Women at increased risk should be screened at their first prenatal visit, which includes those who are obese, are of advanced maternal age, or have a family history of diabetes.

Glucose Intolerance

Glue-bottle Intolerance

Glucose intolerance is a classic sign of gestational diabetes in which the body does not produce adequate amounts of insulin to deal with increased blood sugar that occurs during pregnancy. Blood sugars may remain high and treatment revolves around the goal of keeping blood sugar levels within the required limits for the duration of the pregnancy.

Complications

Retinopathy

Wavy Red-tin-eyes

Chronic and progressive impairment of the retinal circulation that eventually causes hemorrhage as a result of chronic hyperglycemia and hypertension. Diabetic retinopathy is estimated to be the most common cause of new causes of adult blindness.

Peripheral Vascular Disease

Peripheral Vessels Diseased

People with diabetes are at increased risk of developing peripheral vascular disease (PVD), commonly called peripheral artery disease (PAD), which refers to the obstruction or occlusion of arteries. The risk of developing lower extremity PAD is proportional to the severity and duration of diabetes, accounting for up to 70% of nontraumatic amputations. Fatty deposits can build up in the inner linings of the artery walls and hinder blood flow.

Nephropathy

Wavy-kidney

Nephropathy is a complication of diabetes. Excess blood sugar is disruptive to the small blood vessels that supply the glomeruli of the kidney. Seen in about 20-40% of people with diabetes, nephropathy serves as the leading cause of end-stage kidney disease in the US. Risk factors include hypertension, genetics, smoking, and chronic hyperglycemia.

Neuropathy

Wavy Nerve-guy

Neuropathy is nerve damage that occurs as a result of excess sugar injuring the walls of the blood vessels. Sensory neuropathy is the most common type and may include symptoms such as tingling, numbness, burning, pain, and typically occurs at the tips of fingers and toes and can spread upward. If left untreated, one can lose sensation in the extremity, with extreme cases resulting in amputation.