E10.5 - E11.2

E10.5 Type 1 diabetes mellitus with circulatory complications

Diabetes has a big effect on blood vessels. Complex sugar-based substances adhere to vessel walls, causing them to thicken and leak, which makes them incapable of supplying as much blood and oxygen to the tissues as is needed. Poorly controlled blood sugar levels also cause an increase in fatty substances in the blood with the adherence of plaque material to the vessel walls. This atherosclerotic buildup also reduces blood flow and causes poor circulation. Poor circulation to the extremities causes slow-healing wounds prone to infection. Some wounds may never heal and lead to gangrene with the need for amputation.

E10.62 Type 1 diabetes mellitus with skin complications

Because diabetes has such a big effect on blood vessels due to complex sugar-based substances adhering to vessel walls, making the arteries incapable of supplying as much blood and oxygen to the tissues as is needed, the skin may break down and not be able to heal, even without the occurrence of an external wound. This prevents healing and leads to skin problems such as dermatitis, the breakdown of collagen with build-up of fatty deposits, and ulcers, especially in the legs and feet. Diabetic skin ulcers, particularly of the foot and lower leg, often stem from vascular problems caused by poor circulation and poor oxygen supply to the extremities.

E10.620 Type 1 diabetes mellitus with diabetic dermatitis

Diabetic dermatitis includes diabetic necrobiosis lipoidica, which is a necrotizing skin condition marked by collagen breakdown, deposits of fatty build-up, and the thickening of blood vessels. This is chronic condition that progresses slowly with flare-ups occurring. A reddish-brown rash appears at first, usually on the lower legs in most people, with well-defined borders on lesions that slowly grow larger, turning shiny and red with a yellowish center. Some people experience itching and burning with the rash, which may also appear on the trunk, arms, face, or scalp. The lesions eventually turn into a purple depression in the skin that may scar. During flare-ups, treatment may consist of topical creams with sterile dressings, cortizone injections or oral steroids, and ultrviolet light treatment for the lesions. If the lesions do not break open, treatment may not be required and rest and support stockings are used.

E10.64 Type 1 diabetes mellitus with hypoglycemia

In hypoglycemia, the blood sugar falls abnormally low. This happens in diabetics when too much insulin or oral antidiabetic medication is taken, not enough food is ingested, or exercise is suddenly increased without a corresponding increase in food intake. Confusion, shaking, sweating, headache, aggression, heart palpitations, dizziness and fainting are all symptoms. Small, sugar-laden snacks or fruit juice can reverse the low blood sugar, but if not treated promptly, severe hypoglycemia can progress to seizures and unconsciousness, called hypoglycemic or insulin shock. When the brain is deprived of glucose, neurons in the brain that process memory are destroyed and permanent memory loss can result.

E10.65 Type 1 diabetes mellitus with hyperglycemia This code is used to report diabetes mellitus due to an underlying condition when it is stated as "out of control," "poorly controlled," or "inadequately controlled." Diabetes complications often require multiple coding. This code may be assigned with other appropriate diabetes codes to describe the complete clinical picture of the patient.

E11 Type 2 diabetes mellitus

Diabetes mellitus is a systemic, metabolic disease arising from insulinrelated problems. Insulin is a hormone made by the beta cells of the pancreas and secreted into the digestive system. Insulin regulates blood sugar levels as well as the transport, storage, and use of glucose and amino acids. Without effective insulin action, blood sugar levels are difficult to control and become dangerously high. This causes many different complications, especially over time, including poor circulation and blood vessel damage, kidney problems, nerve damage, ophthalmic degeneration, skin breakdown, atherosclerosis, heart disease, and stroke. Diabetes mellitus has different types. Type 2, formerly referred to as adult onset or non-insulin dependent diabetes, occurs when the body develops a resistance to the action of insulin. Even though the pancreas is still producing insulin, sometimes even at higher levels in response to elevated blood sugars, the body's resistance results in not enough insulin to meet the body's needs. Most type 2 patients are diagnosed in adulthood at ages older than 30. With the increasing problems of obesity, sedentary lifestyle, and lack of exercise, type 2 diabetes is being diagnosed more and more often in children and adolescents. Type 2 diabetes can be controlled with oral medications, diet, and exercise, but sometimes also requires insulin injections.

Type 2 diabetes has several risk factors including obesity, age, some racial and cultural group risk factors, certain drugs such as corticosteroids, the presence of other diseases, and familial tendency. Of these risk factors, obesity is the major one for developing type 2 diabetes. Up to 90% of type 2 diabetics are overweight. Obese people require much larger amounts of insulin to maintain normal blood sugar.

Symptoms of diabetes are related to the effects of high blood sugar. Too much sugar in the blood moves into the urine and then the kidneys excrete high amounts of water to dilute the large amount of sugar. People urinate frequently and are excessively thirsty. Excessive calories are also lost and weight loss occurs with a feeling of hunger. Blurred vision, nausea, sleepiness, and decreased physical endurance are also symptoms. Those with type 2 diabetes may not have symptoms for years or even decades before diagnosis. Symptoms may be subtle and mild at first and gradually worsen. Laboratory tests confirm diagnosis by testing for glucose levels in urine and blood.

Note: This category excludes diabetes due to an underlying condition or exposure to toxic chemicals or medicaments, any other types of secondary diabetes, gestational, neonatal, type 1, and postpancreatectomy or postprocedural diabetes.

Note: Diabetes is a pervasive, systemic disease that should be coded even when documentation does not reflect that current medical care was actively aimed at diabetic treatment or intervention.

Note: Report also the appropriate code to identify the use of insulin.

Note: Controlled or uncontrolled status is not considered an axis of coding for the selection of the diabetes code; however, out of control or poorly controlled cases that are so stated in the documentation are reported by using the appropriate code for the type of diabetes with hyperglycemia.

E11.Ø Type 2 diabetes mellitus with hyperosmolarity

Diabetes with hyperosmolarity is a medical emergency that involves extremely high blood glucose levels, dehydration, and decreased consciousness that can lead to coma, without the presence of ketones or acidosis. Hyperosmolarity occurs when high blood concentrations of glucose, sodium, and other molecules become even higher because the kidneys are conserving water. The kidneys normally help balance high blood glucose and ion levels by excreting extra amounts in the urine, but when the kidneys begin conserving water, the concentrations climb higher and there is a greater need for water. Signs include weakness, increased thirst, lethargy, confusion, speech impairment, loss of muscle function, and convulsions. These symptoms may progress over days or weeks and may occur with or without coma. Treatment aims to correct the dehydration with intravenous fluids and electrolytes to improve blood pressure, urine output, and circulation, and the administration of insulin to bring down high glucose levels.

E11.2 Type 2 diabetes mellitus with kidney complications

In diabetics, the renal blood vessels may thicken and leak protein into the urine, which cannot be filtered properly. An abnormally high level of protein in the urine is a sign of early kidney damage. Kidney malfunction or nephropathy can lead to chronic kidney disease and failure. Kidney complications are associated with long term diabetes.