

Diabetes – Type I & II

Treatment:

The main goal of treatment is to normalize insulin activity and blood glucose to reduce the development of complications.

Medical: Insulin Injections, Insulin Pump, frequent glucose monitoring. SMBG Therapy (Self-monitoring of blood glucose)

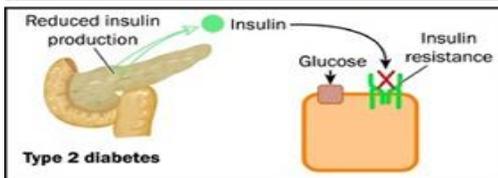
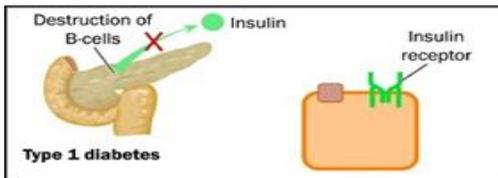
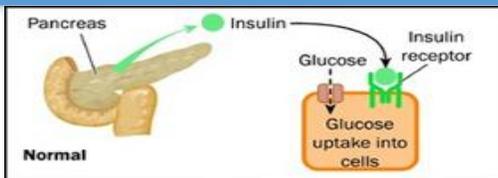
5 components of management: Nutrition (can reverse type 2), exercise, monitoring, pharmacologic and education.

Pharmacologic:

Type 1: Insulin for life

Type 2: can be controlled by meal planning, but may require long-term insulin for those that cannot meal plan or oral agents are ineffective.

Poly-Uria,dipsia,phagia



Pathophysiology:

Type 1: the immune system attacks and destroys the insulin producing beta cells of the pancreas. The beta cell deficiency leads to complete insulin deficiency. Thus, it terms it as an autoimmune disease where there are anti-insulin or anti-islet cell antibodies present in the blood. This cause destruction of the islet of the pancreas, and while destruction takes time, the onset is rapid and may happen over a few days or weeks.

Type 2: This type is caused by a deficiency of insulin that is not absolute. The body is able to produce insulin, just not enough to meet the needs of the body.

Etiology:

Type 1: Autoimmune disorder, Genetic association, Ketosis, no presence of insulin

Type 2: Insulin resistance, Obesity, Family history, insulin is present in body

Labs and Diagnostics:

Blood Glucose to test for abnormally high blood sugar.
FPG or Fasting plasma glucose – in a lab after fasting for 8 or more hours.

2-hour postload test – tested 2 hours after the pt. receives glucose

HgbA1c (A1C) Test

Test for microalbuminuria

Serum creatinine level

Urinalysis

Electrocardiogram

Signs & Symptoms:

3 P's: Polyuria (increased urination), Polydipsia (increased thirst), and Polyphagia (increased appetite)

Fatigue, weakness, sudden vision changes, tingling or numbness in hands or feet, dry skin, slow healing wounds, and recurrent infection.

Type 1: sudden weight loss or nausea, vomiting, or abdominal pains, if DKA (Diabetic Keto Acidosis) has developed.

Risk Factors:

- Being of minority population
- Family history
- Obesity
- Age equal to or <45
- Previously identified impaired Fasting glucose
- HTN (Hypertension <140/90)
- HDL (cholesterol) <35 or a triglyceride >250
- Hx of gestational diabetes or delivery of a baby over 9 lb

Nursing Interventions:

Manage the patient glucose level while hospitalized.

Patient Teaching: Develop an education plan, educate about basic skills on administering insulin. Assess the patients knowledge level, and willingness to learn. Teach pt. how to self administer insulin.

Injections: The nurse needs to know all info regarding insulin (types, needles etc.)