

NURSING HEALTH- Nursing Management of Diabetes CASE STUDY _ ADVANCED PHARMACOLOGY FUNDAMENTALS GRADED A+

diabetes - ✓✓ANSWER✓✓ability to produce or to use the hormone insulin is impaired and results in abnormal metabolism of carbs and elevated levels of glucose in the blood and urine

gestational diabetes (GDM) - ✓✓ANSWER✓✓-develops during pregnancy

-should be reclassified after delivery

-high risk of developing type 2 later

normal physiology - ✓✓ANSWER✓✓-insulin secreted

-glucose enters cell/metabolized

-stored as glycogen in liver, muscle

-fat stored in adipose tissue

-protein synthesized into amino acids

-plasma glucose WNL

type 1 - ✓✓ANSWER✓✓-younger client <20

-sudden onset

-beta cell destruction (no insulin)

-normal/weight loss

complications:

-hyperglycemia - DKA

-hypoglycemia - HHNK

*beta cell destruction leading to absolute insulin deficiency

type 1 etiology - ✓✓ANSWER✓✓genetic predisposition - gene associated with HLA antigen on the 6th chromosome

environment - virus, auto immune response destroys beta cells

type 2 - ✓✓ANSWER✓✓-older client

-gradual onset

-insulin resistance/beta cell dysfunction

-obesity

-acute complications: hyperglycemia, hypoglycemia, HHNK

*insulin resistance and secretory deficit

type 2 etiology - ✓✓ANSWER✓✓-no single gene identified

-polygenic/family Hx/obesity

-impaired insulin resistance on cell surface

-ethnicity, increased risk for African American, Native American and Hispanic populations

metabolic syndrome - ✓✓ANSWER✓✓syndrome x

-central obesity

-high BP

-high triglycerides

-low HDL cholesterol

-insulin resistance

polyuria - ✓✓ANSWER✓✓increased urination

polydipsia - ✓✓ANSWER✓✓increased thirst

polyphagia - ✓✓ANSWER✓✓increased hunger

HgA1C - ✓✓ANSWER✓✓reflects average blood glucose over 3 month period

acute complications - ✓✓ANSWER✓✓-hypoglycemia

-hyperglycemia

-sick days

chronic complications - ✓✓ANSWER✓✓-glycosylation

-macro and micro-vascular changes

-wounds

hyperglycemia - ✓✓ANSWER✓✓-dry, warm skin, flushed face

-N/V

-abdominal pain

-thirst, dehydration

-altered LOC, lethargic

-fruity breath

-Kussmaul resp

primary prevention - ✓✓ANSWER✓✓measures to reduce obesity in those with risk factors

secondary prevention - ✓✓ANSWER✓✓screening high risk populations based on

-family history

-elderly

-obesity

tertiary prevention - ✓✓ANSWER✓✓prevent acute and chronic complications in those diagnosed with diabetes

type 1 symptoms - ✓✓ANSWER✓✓-frequent urination

-unusual thirst

-extreme hunger

-unusual weight loss

-extreme fatigue and irritability

type 2 symptoms - ✓✓ANSWER✓✓-frequent infections

-blurred vision

-cuts/bruises slow to heal

-tingling/numbness to hands/feet

-recurring skin, gum, or bladder infections

fasting plasma glucose normal - ✓✓ANSWER✓✓<100 mg/dL

OGTT normal - ✓✓ANSWER✓✓<140 mg/dL

fasting plasma glucose pre-diabetes - ✓✓ANSWER✓✓100-125 mg/dL

OGTT pre-diabetes - ✓✓ANSWER✓✓140-199 mg/dL

fasting plasma glucose diabetes - ✓✓ANSWER✓✓>126 mg/dL

random plasma glucose diabetes - ✓✓ANSWER✓✓>200 mg/dL with 3 P's