

DT 4th Course Title: General Pharmacology II

Student Name: Muhammad yaseen

Student ID: 14796

**QUESTION.1: (A)**

**ANS: TYPE 1 DIABETES MELLITUS:**

A from chronic hyperglycemia caused by immunologic destruction of pancreatic beta cells

**TYPE 2 DIABETES MELLITUS:**

A from of chronic hyperglycemia initially caused by resistance to insulin, often progresses to insulin deficiency

**DIFFERENTIATE BETWEEN TYPE 1 AND TYPE 2 DIABETES MELLITUS:**

**TYPE 1 DIABETES MELLITUS:**

- There is an absolute deficiency of insulin production and loss of pancreatic beta cells
- Antibodies against beta islot cells of the pancreas insulin are often present. It is considered an autoimmune disease.
- Insulin resistance is not a commonly recognized feature
- It tends to not be associated with obesity. Marry patient with it are thin

**TYPE 2 DIABETES MELLITUS:**

- There is a relative deficiency of insulin production and loss of pancreatic beta cells of a lesser degree than with type 1 disease.
- Autoantibodies are usually not present. It is not considered to be an autoimmune disease.
- Insulin resistance is a commonly recognized feature.
- Most patient with it are overweight or obese. But rarely thin.

**QUESTION.1: (B)**

**ANS: INSULIN PREPARATIONS:**

Human insulin is manufactured by bacterial recombinant DNA technology. The available from provide 4 rates of onset and duration of effect that range from rapid-acting to lung acting.

Because due to 4 rates of insulin this type of insulin are very effective and more important for our life activity.

QUESTION.2: (A)

**ANS: ROLE OF VITAMIN K:**

Vitamin k is a group of structurally similar fat soluble vitamins the human body requires for complete synthesis of certain proteins that are pre-requisites for blood coagulation that the body needs for controlling binding of calcium in bones and other tissues, the vitamin k, related modification of the protein allow them to bind calcium ions. Which they cannot do otherwise without vitamin k, blood uncontrolled bleeding occurs, low levels of vitamin k, also weaken bones and promote calcification of arteries and any other soft tissues.

QUESTION.2: (B)

**ANS: THROMBOLYTIC AGENTS:**

A drug that is able to dissolve a clot thrombus and reopen an artery or vein.

Thrombolytic agents may be used to treat a heart attack, stroke deep vein thrombolus clot in a deep leg vein. Pulmonary embolism and occlusion of a peripheral artery or indwelling catheter. All thrombolytic agents are seine profeam etc.

FOR EXAMPLES:

The most commonly used clot busting drugs. Also known as thrombolytic agents include Eminas, anistreplase, reteplase, streptase streptokinase, kabikinase etc

QUESTION.3: (A)

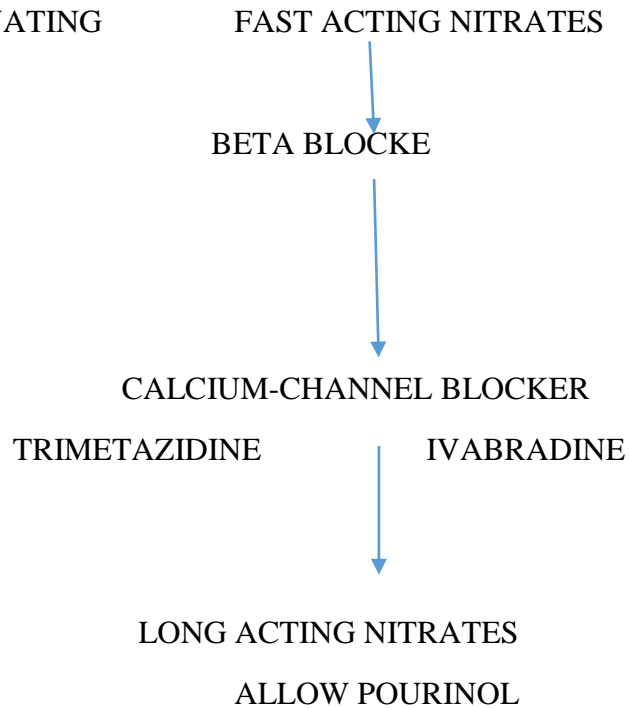
**ANS: ADVERSE EFFECTS OF ORGANIC NITRATES:**

- The most common adverse effects of organic nitrates are headache.
- Hypotension, facial flushing and tachycardia and organic nitrates can also cause postural.
- Sildenafil potentiate the action of nitrates to preclude the dangerous hypotension that may occur this combination is contraindicated.

ANS: (b)

TREATMENT OF ALGORITHM:

CONTROL OF AGGRAVATING



QUESTION.4: (A)

ANS: **PRIMARY HYPERTENSION:**

Essential hypertension is the term applied to the 95% of the hypertension patients in which elevated blood pressure result from complex interaction between multiple genetic and environment factors

**SECONDARY HYPERTENSION:**

It account for only 5-7% of hypertensive patients. Secondary hypertensive should be suspected in patients in whom hypertension develops at an early age.

### ANSWER. (B)

Plasma angiotensin levels are close enough to Michaelis-Menten constants for renin that small increase in either renin or angiotensinogen may increase any II production and alter blood pressure, notably, elevated renal-specific expression of AGT causes systemic hypertension without a change in circulating angiotensin II.

### Answer 3

#### ©: IMPORTANCE OF PHARMACOLOGICAL TREATMENT:

Hypertension or high blood pressure is dangerous because it can lead to stroke, heart attack

Heart failure, or kidney disease, the goal of hypertension treatment is to lower high blood pressure and protect important organs

Like the brain, heart, kidney from damage.

### ANSWER.5:

#### A: LEFT HEART FAILURE

- TACHYPNEA
- PULMONARY EDEMA
- CYANOSIS
- APEX BEAT
- GALLOP RHYTHM
- HEART MURMURS

#### RIGHT HEART FAILURE

- PAINFUL PERIPHERAL
- EDEMA
- ASCITES
- HEPATOMEGALY
- JUGULAR VEIN
- DISTENSION

### ANSWER: B)

#### PHARMACOTHERAPY OF HEART FAILURE:

Most patients with symptomatic systolic heart failure SHF should be routinely treated with an angiotension-converting enzyme ACE inhibitor, a beta blocker and a diuretic. The benefits of the benefits of these medications in slowing HF mortality and or improving symptoms are clearly established.