DT 4th
Course Title: General Pharmacology II

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Note:
Attempt all questions
Each question carry equal marks
Pay attention to every point of question
Give to the point answers
Extra detail may leads to marks deduction

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QUESTIONS (1)

PART (A)

Answer..,, TYPE (1) DIABETES MELLITUS

This type of diabetes mellitus is caused by immunological destruction of pancreatic beta cells. It is a form of chronic hyperglycemia. It is mostly happen in child hood.Insuline is required for treatment of this disease.

TYPE (2) DIABETES MELLITUS

It is a progressive disorder caused by increase insulin resistance and diminished insulin secretion capacity. It associated with obesity. It usually has onset in adulthood.Early stages of this disease is controls by antidiabetic drug.

PART (B)

Continuous Subcutaneous Insulin Infusion Device,,.This device for insulin delivery because it avoid the need for multiple daily injection and provide flexibility in scheduling of patients daily activities. Programmable pumps deliver a constant 24h basal rate and manual adjustments in the rates of delivery can make to accommodate changes in insulin requirements.

QUESTION(2)

PART (A)

Answer,..ROLE OF VITAMIN (K)

It is a fat soluble VITAMIN used for the treatment of bleeding. It is more common in order person with abnormalities of fat absorption and in newborn, who are risk of bleeding due to vitamin K deficiency. This abnormalities is treated by oral or parenteral phytonadione(vitamin k1)

PART (B)

ANSWER,,.. THROBOLYTIC AGENT

All those agents that reduce clot formation are called thrombolytic agents. Plasmin is endogenous fibrinolytic enzyme that reduce clot by splitting fibrin to fragments.

1] TISSUE PLASMINOGEN ACTIVATOR,,..It is an enzyme that convert PLASMINOGEN to plasmen.it has little activities when it binds will fibrin.

2] STREPTOKINASE..,,It obtained from bacteria and form complex plaminogen.

SPECIFIC AGENTS..,, alteplase,recombinant, antistreplase.

QUESTION (3)

PART (A)

Answer..,,EFFECT OF OGANIC NITRATES

It has two major effect

1) Dialation of large veins resulting in fooling of blood in veins which diminished the preload and decrease the work of heart.

2) it dilaties the coronary vasculature providing increase blood supply to the heart muscle,decrease preload and after load as well as relieving vasospam .It decrease cardiac work.

AGENTS,,...Nitroglyserin, isosorbid,,.

ADVERSE EFFECTS OF NITRATES

It can causes headaches in about 3o% to 60% of patients because of pronounced vasodialation.High dose can causes postural hypotension, flushing, tachycardia.

PART [B]

TREATMENT ALGORITHM FOR IMPROVEMENT SYMPTOMS OF STABLE ANGINA

When stable ANGINA symptoms is presente then we administered the sunlingual nitroglycerin for immediate relief.When these drugs are unable to show good effect then we administered Beta blocker.If it inadequate to remove stable ANGINA.After this we add Calcium channel blocker or long acting nitrate.When these drugs never show good effect then we administered Ronolazine which is a calcium channel blockers and reduce contraction.

QUESTION[4]

PART (A)

ANSWER..,, primary Hypertension

It is also known as essential hypertension. The hypotension take place with unknown disease. A disorder of unknown origin affecting the blood pressure regulating mechanism .

SECONDARY HYPERTENSION

The type of hypertension is caused by a specific type of disease. For example in obese person fats create more pressure in blood vessels and make more load on heart.

PART(B)

EFFECT OF RENIN ON HYPERTENSION

It is a hormone realized by a gland which can convert angiotensin I to angiotensin II.The angiotensin 'II stimulate the aldosterone hormone. That aldosterone hormone reached to kidney through blood and causes retention of sodium and water inside nephrone resulting increase the blood volume and increase blood pressure.

PART (C)

IMPORTANT OF PHARMACOLOGICAL TREATMENT OF HYPERTENSION

Chronic hypertension can leads to blood vessels damage, heart attack and kidney failure. Diuretics drugs are used to increase urination and protect us from these disease. Sympatholytic drugs are decrease sympathetic outflow and can decrease norepinephrine that leads t o vasodialation and decrease blood pressure. Sympatholytic drugs and 1 adrenergic blocker causes vasodialation due to relaxation of vascular smooth muscle and reduce preload by fooling of blood that leads to decrease blood pressure.

QUESTIONS(5)

PART (A)

Answer.,, RIGHT HEART FAILURE

The right atrium and ventricle are never able to properly manage the return blood from systemic circulation. This condition can causes to accumulate fluid in peripherals tissue and ankle edema and organ congestion are typically manifestation.

LEFT HEART FAILURE

When the left atrium and ventricle are never able to handling the blood turning from lungs.This causes pressure to build up in pulmonary veins and fluid accumulate in lungs. It is associated with pulmonary.

PART (B)

PHARMACOTHERAPY OF HEART FAILURE

Increase the contraction of heart as well as performance of it is called positive inotropic effect. It refers to the force of muscular contraction. The drugs used for inotropic effect are called cardiac glycosides.

When decrease cardiac workload through an effect on the heart or peripheral vasculature or by controlling fluid volume are recognized as beneficial in congestive heart failure. Angiotensin converting enzyme inhibitor, beta blocker, diuretics and vasodialation.

AGENTS..,, Digoxin,Digitioxin.

Phosphodiesterse agents causes CAMP mediates increase intracellular calcium and causes contraction of heart.