

## Assignment

Course Title: Chemical Pathology

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### Section A

- Two students of MLT are talking about the use of cholesterol in food one says its good to have cholesterol in food the other said use of more cholesterol is not good for our health, they both asked from his class teacher and he replied "having high triglyceride levels in your blood can make you more likely to have \_\_\_\_\_
  - Arthritis
  - Feet infections
  - Heart disease**
  - Beri Beri
- Focal segmental glomerulosclerosis is a disease that scars the \_\_\_\_\_
  - Bowman's capsule
  - Glomeruli**
  - Pancreases
  - Liver
- Minimal change disease "MCD" is the most common cause of nephrotic syndrome in \_\_\_\_\_
  - Women
  - Men
  - Children**
  - Aged
- The main signs or symptoms make up nephrotic syndrome is/are \_\_\_\_\_
  - Proteinuria
  - Hyperlipidemia
  - Hypoalbuminemia
  - All of the above**
- To diagnose a patient nephrotic syndrome, you should go for?
  - Urine Test
  - Blood Test
  - Biopsy
  - All of the above**
- Your class teacher gives you a history of patient such that a patient having yellow skin and body fluid that is the by-product of RBCs breakdown, Red blood cells typically survive for about 120 days before the body breaks them down, an increased breakdown of RBCs made the skin and body fluids colour yellow, this is due to \_\_\_\_\_
  - Bilirubin**
  - Cytokines
  - Alpha blockers
  - Side effects of NSAIDs
- New-borns with jaundice are carefully monitored and generally improve within \_\_\_\_\_ hours.
  - 04 to 07
  - 10 to 12**
  - 12 to 24
  - 48 to 72
- All are true regarding Bilirubin Test Except?
  - Is used to detect an increased level in the blood
  - Determine the cause of jaundice**
  - Cannot diagnose blockage of the bile ducts.
  - Help diagnose conditions
- A patient of malabsorption syndrome is admitted in LRH ward and you have to test the condition, of all the possible diagnostics test the most reliable test of malabsorption is \_\_\_\_\_
  - Stool test**
  - Blood test
  - Berth test
  - Imaging
- The Urine Albumin to Creatinine Ratio (UACR) is a test that estimates how much albumin is excreted in a \_\_\_\_\_ period without requiring patients to collect urine for a whole day.
  - 12-hour
  - 24-hour**
  - 48-hour
  - 72-hour

11. Which option are not **true** about kidney functions?
- A. Filter waste materials and toxin from the blood
  - B. Production of vitamin E**
  - C. Red Blood Cells (Erythropoietin) formation
  - D. Synthesize hormones that regulate blood pressure

12. Structural and Functional unit of the kidney is?
- A. Renal corpuscle
  - B. Renal tubule
  - C. Nephron**
  - D. All of the above

13. Normally: The pH of urine
- A. acidic
  - B. alkaline
  - C. varies from acidic to alkaline**
  - D. varies from alkaline to acidic

14. Uric acid is the end product of ..... catabolism.
- A. Thymine
  - B. Pyrimidin
  - C. Purine**
  - D. Urea
15. ....is known as the good cholesterol.
- A. HDL**
  - B. LDL
  - C. VLLDL
  - D. triglycerides

*Section B*

**Q1 what do you know about proteinuria?**

**Q2 explain Ketonuria and phenylketonuria in detail.**

**Q3 Enlist all the possible cause of Cushing syndrome.**

**Q1) ENLIST ALL THE POSSIBLE CAUSES OF CUSHING SYNDROME?**

**ANSWER...**

### **CUSHING SYNDROME,**

Cushing syndrome is the body in visible to hormone cortisol higher level of it, the high level of hormones cortisol for a long time, Cushing syndrome are also sometimes called hypercortisolism, it is caused by the use of oral corticosteroid drugs, the condition also occur in the body to produce more than cortisol is a prominent sign of a fat hump Cushing syndrome between the shoulder if the around face and pink or purple marks on the skin Cushing syndrome can also cause hypertension, diabetes 11, and bone loss.

Treatment of the Cushing syndrome to production of cortisol is normal.

### **POSSIBLE CAUSES,**

Higher levels of hormones cortisol are responsible for the Cushing syndrome, cortisol is the produce in the adrenal glands and play a important role.

#### ***Endogenous cause:***

More than more production of cortisol.

#### ***Exogenous cause:***

Taking medication to contain glucocorticoids for example hydrocortisone.

#### ***Pituitary tumor:***

Endogenous causes 70 percent of cushing disease.

#### ***Adrenal tumor:***

Endogenous cause about 15 percent and other unknown casuses,15 percent of endogenous cause.

#### ***ACTH independent.***

#### ***ACTH dependent.***

**THE END.**

## **Q2) EXPLAIN KETONURIA AND PHENYLKETONURIA?**

**ANSWER...**

### **KETONURIA,**

Ketonuria is a medical condition that the Ketonuria is the excretion of abnormal of ketone bodies in the urine. Ketones are the metabolic end product of fatty acids metabolism in healthy individuals, Ketones are formed in the liver and fully metabolized so the only the amount of urine is absorbed.

When carbohydrates are not available or unable to be used as energy sources, grease become the body's main fuel instead of carbohydrates and excessive amount of ketones are the body's main fuel instead of carbohydrates and excessive amount of ketone, indicate that the body is using fat as a major source of energy.

### **CAUSES**

#### *DIABETES MELLITUS,*

Presence of glucose to use are not present the glucose to use another source of energy like fats to use it. In the process of ketone will start and glucose to used it the form of carbohydrates. Glucose and carbohydrates use in the form of energy.

### **SIGN AND SYMPTOMS,**

Ketones bodies are more than the urine to smelling the mouth it, look like same smell to the Neil polish it.

#### *NAUSEA AND VOMITING,*

To electrolytes is more than into the blood to cause nausea and vomiting can occur.

#### *FREQUENTLY URINATION,*

In more than lost electrolytes.

#### *TREATMENT AND CONTROL,*

Exercise, drugs,

Glucose levels,

And fats,

Carbohydrates, loss of the body.

### **PHENYLKETONURIA**

Phenylketonuria is also commonly known as PKU, phenylketonuria as hereditary disorders that increase the levels of substances called phenylalanine, in the blood these phenylalanine as a block of protein are called amino acids these amino acids are protein whack is obtain via or through the diet, mutations in the gene for the phenylalanine hydroxylase also called PAH. Autosomal recessive metabolic genetic disorders, when PAH activity is decrease phenylalanine is added and converted to phenylphrolite (phenyl acetone),which is can be detected in urine, untreated PKU can be lead to serious medication problem like seizures rare PKU is estimated to effect 1in every 10,000onlides.

## **SYMPTOMS,**

PKU symptoms such as classic PKU, most severe form this disorders, this condition can be occur in infants or child's and first few months, child's untreated to occur like this symptoms hyperactivity, tremors, seizures, etc. PKU is not diagnosed at birth soon then the error may occur brain damage disabilities first few months of life.

## **CAUSES,**

PKU is inherited genetically disorders.

## **DIAGNOSIS,**

Take a blood simple.

## **TREATMENT,**

Diet or contains fruits and foods.

## **THE END**

### **Q3) WHAT DO YOU ABOUT PROTONURIA?**

**ANSWAR...**

## **PROTENURIA,**

When healthy kidneys filter blood minerals and waste from the blood, they usually do not allow large amount of serum protein to pass into the wine. But wine the kidneys are not filtered properly, there may be protein urine which means that there is an unusual amount of protein the urine binding substance as fully soluble in water such as fats soluble calcium and vitamins and some medications, globulin are dived into Alpha, beta and globulin. Alpha and beta globulin transport also substance, and gamma also called immunoglobulin, for protein testing in the urine Is contain all the different protein only albumin,

## **TYPES,**

### **1) *TRANSEINT PROTONURIS,***

Protunuria is they are taking a short time also called acut and they are do not cause a disease that are a condition and a not required treatment is it.

### **2) *ORTHOSTATIC PROTUNRIA,***

Orthostatic Protunuria that are a normal condition and that condition is kidneys will be normal upright position is excreted a increased amount of protein in the body.

### ***CAUSES,***

The disease are not involve the kidneys, such as multiple myeloma cancer of the plasma cells in the bone marrow, proteinuria is a kidneys disease like or such as kidneys, glomerulonephritis.

### ***SYMPTOMES,***

Protein loss is a sever condition, swelling or can occur, edema can be present in the face around the eyes.

### ***OTHER SYMPTOMS,***

Hypertension, appetite, fomey urine.

### ***DIGNOSIS,***

Number of test perfume on the urine and, urinary cast.

### ***TREATMENT,***

Proteinuria is a symptoms are not disease, ACE inhibitors or medication used for the treatment of hypertension,

**THE END**