

①

Name = M- Kashif

ID = 14897

Paper = Clinical Medicine

Date = 24/06/2020

Teacher = Mrs. Mahe Gul.

Ans No 1

Hydronephrosis:

:- Hydronephrosis is that type of condition that typically occurs in when a kidney swells due to urine failing to properly drain from the kidney to bladder. This swelling most commonly affects only one kidney, but it can involve both kidney.

Hydronephrosis is not a primary disease - It is secondary condition that result from some other underlying disease. It is structural and it is result of a blockage.



of obstruction in the urinary tract

**effect:-**

∴ Hydronephrosis is said to be effect about 1 in every 100 babies.

**Causes:-**

∴ Hydronephrosis is not a disease instead it can be due to internal and external condition that effect the kidney and the urinary collecting system.

One of the most common cause of hydronephrosis is acute unilateral obstructive uropathy. This is the sudden development of an obstruction in one of your ureters which are the tube that connect your kidney to your bladder.

The most common cause blocked of kidney stone scarring and blood clot can cause obstructive uropathy.

A block ~~ureter~~ <sup>ureters</sup> can cause urine back into the kidney.



(3)

The basic flow is known  
(UUR)

A kink in the ureteropelvic  
junction which ureter meets  
the pelvis of the kidney

enlarged prostate gland in  
men can due to benign  
prostate gland hyperplasia (BPH) or  
prostate.

Tumors near to ureter

Pregnancy causes a compression  
due to growing fetus.

narrowing of ureter injury of  
birth effect.

## Pathophysiology:

Dilatation of the renal pelvis  
and calyces.

## Type of hydronephrosis:

pelvic type  
renal type  
pelvorenal type  
calyces type  
both are  
type: most common  
the pelvis and  
equally dilated.



(4)

## Diagnosis:

∴ your kidney could permanently condition left untreated for too long

Your doctor will perform renal scan to get a closer look at extent of swelling and to possible locate the area of the blockage

• Bluu

- Isotope renography.
- Cystoscope
- RGP
- Urine culture
- Delayed empty

## Treatment:

∴ Treatment of hydronephrosis is getting is urine primary sid blocking the flow of whatever

if a blocked ureter is causing doctor do any of the following



(5)

insert a ureteral stent which is a tube that allow the ureter to drain in to the bladder.

insert a nephrostomy tube, which allow the blocked urine to drain through the back

prescribe antibiotic to control infection

Some time scar tissue is cause blockage your doctor remove the effected area.

Some time doctor use the endoscopic surgery to remove the procedure. This is done classically to reduce your healing becomes time.



(6)

Answer No 2

## Tuberculosis:

∴ It is infection disease cause by bacterium is called Mycobacterium tuberculosis.

## Type / Categories

Active TB

Latent TB

Milliary TB

## Active TB:

∴ It is illness which TB is rapidly multiplying and invading different organ of the body.

## Symptoms:

- ∴ Cough
- ∴ phlegm
- ∴ chest pain
- ∴ weakness
- ∴ weight loss
- ∴ Fever
- ∴ sweating at night



(7)

It can be spread by  
diseases transmission infected  
particulate cough into the air

### Milliary TB:

∴ Milliary TB is a  
rare form of active disease  
that occurs when TB bacteria  
And in the blood stream  
in this form the bacteria  
quickly spread all over the  
body in tiny nodules and  
effect multiply organs at  
once

This form of TB rapidly  
fatal.

Milliary TB cause just active  
TB in addition to other  
symptoms depending in  
body part. Example if  
your bone marrow is affected  
you may have low red blood  
cell count or a rash.



(8)

## Latent TB

Many of those who are infected with TB do not develop chest disease. They have no symptoms and their chest X-ray may be normal.

They bacteria are present in very small amount and do not develop diseases. They are controlled under immune system.

However, there is an ongoing X-ray that the latent infection may turn into active disease. The risk increase by other illness such as HIV or medication which compromise the immune system.



(19)

## Patho physiology:-

Infection occurs when person when tubercle bacilia reach to alveoli of lungs.

Bacila are ingested by alveolar macrophage. Some of these bacilia destroyed.

Small number multiply cellular destroyed are released. When macrophage die if this bacily spread lymphatic channel through blood stream to more distant tissues and organ. This process of dissemination prime the immune system for a systemic response.

A small number of tubercle bacilli enter the blood stream and spread throughout the body. The tubercle bacillia may reach any part of the body including areas where the TB disease is more likely to develop (such as brain, larynx, lymph node, lungs).



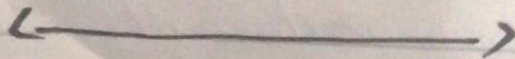
spine and bone or (kidney)

2 to 8 weeks special immune cell called macrophage ingest and surround tubercle bacilia

The cells form a barrier shells called granuloma. That keep the bacilia contain and under control (LTBI)

- If the immune system can't keep the tubercle bacilia under control the bacilia begin to multiply rapidly. (TB disease)

This process can occur in different areas in the body, such as the lungs, kidney, brain or bone.





(11)

Answer No: 3

## Formation of Renal Stone

Kidney stone is formed when your urine contain more crystal forming substances such as calcium, oxalate and uric acid. then the fluid in your urine can dilute at the same time and your urine many lack substances that prevent crystal from sticking together, creating an ideal environment for kidney stone to form.

## Type of Renal Stone.

### Calcium Stone:

The most type of kidney stone is calcium stone. usually in the form of calcium oxalate

Calcium stone may also occur in the form of calcium phosphate. The type



of stone is more common metabolic renal tubular acidosis. Such as may also be associated with certain medication used to treat migraines or seizures such as topiramate.

## Calcium phosphate stone

Calcium phosphate stone are kidney stone are caused abnormalities in the way to the urinary system function. This type of stone which often occurs simultaneously with calcium oxalate stones.

## Struvite stones:

Struvite stones form an response to urinary tract infection. These stone can grow quickly and become quite large. Sometimes with few symptoms or little warning.

## Uric acid/ Stone:

Uric acid stone can form in people



(13)

have which too much fluid because of chronic diarrhea or malabsorption those who eat a high-protein diet and those with diabetes or metabolic syndrome. Certain genetic factors also may increase your risk of uric acid stone.

**Cystine stones:-**

∴ These stone form in people with a hereditary disorder called cystinuria that causes kidney to excrete too much of a special amino acid.

**Diagnosis kidney stone:-**

**Blood Test:-**

∴  
Doctor may collect a small amount of blood in the order to assess your kidney function. Look for sign of infection and test for factors that can contribute to the formation of kidney stone such as high calcium level parathyroid and uric acid.



## Urine tests:

Urine test check  
For crystal formation which lead  
of kidney

## ultra sound:

Doctor can recommend  
ultrasound evaluate kidney, bladder  
ureters carry urine from  
the kidney to the  
bladder

(4) Intravenous Pyelogram

(5) Retrograde Pyelogram

(6) Kidney - Ureter - Bladder x-ray.

A kidney - ureter - bladder, or

KUB x-ray of abdomen  
and pelvis can help doctors  
to determine whether a  
kidney stone has grown,  
passed or retained.

## CT:

CT can look for stone  
in the kidney.



MRI:

(15)

MRI can be used  
computerized two or three  
dimensional image used to  
evaluate

Answer NO 4:

Goiter:

:- A Goiter is an abnormal  
enlargement of the thyroid gland.

It secretes hormones that help  
regulate bodily functions - including  
metabolism. The process that  
turns food into energy.

Type of Goiter:

:-  
Goiters have many causes. As  
a result there are different  
types.

Colloid Goiter:

:- A colloid goiter  
develops from the lack of  
iodine, a mineral essential to  
the production of thyroid



Hutterites - people who get this type of goiter usually live in areas where iodine is scarce.

## Non-toxic!

This cause of a non-toxic goiter is usually unknown through it may be caused by medication like lithium is used to treat mood disorders such as a bipolar and thyroid function is healthy. They are also benign.

## Toxic Nodular or Multinodular

### Goiter:

This type of goiter forms one or more, small nodules at it enlarges. These nodules produce their own thyroid hormones, ~~causing~~ causing hyperthyroidism. It generally forms as extension of a simple goiter.



## Causes:

∴ Iodine deficiency is the main cause of goiter, iodine is essential to helping your thyroid hormones, when you don't have enough iodine the thyroid work extra hard to make thyroid hormone, causing the gland to grow larger.

Other cause include the following

## Grave's disease:

This disease occurs when thyroid produce more than normal thyroid hormones known as hyperthyroidism. The excessive production of hormones make the thyroid increase in size.

## Hashimoto's Disease

When you have hashimoto disease they thyroid doesn't produce enough thyroid hormones causing hypothyroidism. The low thyroid hormone cause the pituitary gland to make



(18)

more thyroid ~~hormones~~ stimulating hormone (TSH), which cause the thyroid to swell.

Inflammation:

∴ Some people develop thyroiditis, an inflammation of the thyroid that can cause a goiter.

Nodules:

Solid or fluid containing cysts may appear on the thyroid and cause it to swell. They are often non-cancerous.

Thyroid Cancer:

∴ Can have effect on one side of the gland. Thyroid cancer is not as common as the formation of benign nodules.

Pregnancy:



(19)

## Diagnosis:

The goiter is diagnosed. :-  
Will the doctor will check  
for neck for swelling. They will  
all order a number for  
diagnostic test that include  
these below.

## Blood Test:

:- Blood test that  
can changes in hormones  
level and in increased  
production of antibodies. Which  
are produced in response  
to an infection or injury.

## Thyroid Scan

:- The doctor may  
order scan your thyroid.  
These scans show the  
size and condition of  
your goiter.

## Ultrasound:

The ultrasound  
can produce an image  
of your neck, the size  
of your goiter and  
whether there are nodules  
over times. An ultrasound  
can show change in  
those nodules and the goiter.



## Biopsy:

A biopsy is procedure that involves taking small samples of your thyroid tissue. The samples are sent to a laboratory for examination.

## Treatment:

The doctor treated that the doctor will decide on a course of treatment based on the size and condition of your goiter and symptoms associated with it. Treatment is also based on health problems that contribute together.

## Medication:

Hypothyroidism or hyperthyroidism medication that cause to treat these condition may be enough to shrink a goiter.

## Surgeries:

Surgery can remove your thyroid.



(21)

know as thyrotoxicosis is  
an option if your glands  
too large or don't  
respond to medication. Hypophy.

## Radioactivity Iodine:

Toxic multinodular goiter RAI  
may be necessary. The RAI  
is ingested orally and then  
travels to your thyroid  
through your blood, where it destroys  
the excess tissues.

## Home Care:

:- Depending on your  
type of goiter, you may  
need to increase or decrease  
your iodine intake at home  
if a goiter is small  
and doesn't cause any  
problems, you may require  
no treatment at all.

P.T.O

(—)



1922

Answer No 5

### Atelectasis:

∴ It is the partially or completely collapse of lung is called atelectasis.

may involve entire lung or a lobe and a segment or be subsegment.

§ segment

There are 5 mechanism of atelectasis.

- 1) obstructive.
- 2) Non obstructive.

### Risk Factors:

Anesthesia → Foreign bodies in the airway lung disease mucous plugging of the airway pressure caused by mass of fluid

### Symptoms:

∴ Trouble breathing  
pleurisy  
cough  
fever.



(23)

## Obstructive Atelectosis:

= common type  
=> blockage of airway  
=> Resorption atelectasis occurs when an obstruction prevent air from reaching distal airways

It is the consequences of complete obstruction of the airways

## non-obstructive Atelectosis

- => Passive
- => Compressive
- => Catarrhal
- => Adhesive

These have no obstruction  
Bronchoscopy is not therapeutic

## Passive (Relaxation) Atelectosis:

2nd most common of atelectosis  
It is contact b/w parietal and visceral pleural is lost due to pleural effusion or pneumothorax.



(24)

lead to generalized collapse.

## Compressive Atelectasis

external compression of lung.

caused by localized collection of pleural fluid or mass in chest wall pleura.

## Adhesive Atelectasis:

caused by adherence of the alveolar wall surface in the sitting of surfactant deficiency (e.g. hyaline membrane disease).

## Cicatrization:

secondary of lung subsegment of fibrosis (scarring) parenchyma with expansion.

etiologies include ~~granuloma~~ granulomatous disease, necrotizing pneumonia and radiation.



(25) ~~25~~

Re-expand of the lung

percussion of the chest

Bronchoscopy

postural drainage

## Pneumonia:

∴ It is inflammatory condition of the lung affecting primarily the small air sacs known as alveoli.

It is the most common cause of death.

It is usually caused consolidation

## Symptoms:-

- ∴ = cough
- = difficult breathing
- = Rapid breathing.
- = Fever



26

## Classification.

### Typ 1 (Morphological) Classification

• Lobar pneumonia.

• Bronchopneumonia.

### Type 2 Clinical Classification.

• Community-acquired pneumonia (CAP)

• Hospital-acquired pneumonia (HAP)

The organisms which cause lobar pneumonia are streptococcus pneumoniae more than 90 cause.

### Morphological stages:

4 morphological stages in

Lobar pneumonia.

• Congestion

• Red hepatization

• Grey hepatization

• Resolution.



127)

## Chest X-ray For Lobar pneumonia

Consolidation confined to one or more lobes of lungs

### Clinical diagnosis.

- History
- Sign and symptoms
- chest x-ray.
- CT.

### Complication

Possible complications include.

- Acute respiratory disease syndrome (ARDS)
- Fluid around the lung
- Lung abscesses
- Respiratory failure
- Sepsis, which may lead to organ failure.



(28)



## bronchiectasis:

Bronchiectasis is a disease in which there is permanent enlargement of parts of the airways of the lungs.

### Etiology:

:- Bronchiectasis is the result of chronic infection with resultant pulmonary infection, destruction, fibrosis and abnormal permanent dilation of damaged bronchi. Following condition may lead to bronchiectasis.

- Long lasting bronchial obstruction
- congenital or heredity condition



(24)

~~(30)~~

## (a) Cystic Fibrosis:

bronchial obstruction and infection due to abnormally thick mucus which plugs the smaller bronchi

## Diagnosis:

• Clinical

• Radiology: Chest x-ray may be non-specific with disease.

• CT scan. bronchial pseudomonas aeruginosa H. influenzae

## Treatment:

- > Eliminate cause.
- > improve tracheo bronchial clearance
- > Control infection
- > Reverse airflow obstruction



(30) ~~(30)~~

→ Chest Physical Therapy

→ Bronchodilators

→ Antibiotics - Short course, prolonged course, intermittent & regular courses, inhalation.

The End

