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15315

Assignment

Clinical Medicine

Team

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BS Radiology 4th Semester.

## Answer No: 01

### USE of Nuclear medicine of thyroid:-

- ⇒ Nuclear medicine Plays a major role, both in the diagnosis and therapy of thyroid pathologies.
- ⇒ Use of radioactivity in pediatric population is strictly controlled due to possible side effects such as secondary cancers.
- ⇒ Therefore, management of pediatric patients requires detailed literature knowledge.
- ⇒ Nuclear medicine is directly involved in both the diagnosis and treatment of benign thyroid disease.
- ⇒ Thyroid uptake and imaging, the principle nuclear tests in thyroid disease, may be used as follows
- ⇒ Differential diagnosis of ~~hyperthyroidism~~ hyperthyroidism
- ⇒ Function of thyroid nodules  
fine-needle aspiration biopsy with cytological examination (FNAB) is used routinely to assess for ~~the~~ malignancy in thyroid nodules.
- ⇒ Differential diagnosis of congenital hypothyroidism.

Scintigraphy Combined with ultrasound examination may be used to identify such conditions as thyroid agenesis, dysplasia, and incomplete thyroid descent.

⇒ Treatment of Graves' disease and toxic nodular disease with  $(^{131}\text{I})$  may require greater clinical involvement and decision analysis compared with thyroid uptake and imaging.

⇒ The most common treatment is ~~levoth~~ levothyroxine (Levoxy, Synthroid, Tiroxint, Unithroid, Unithroid Direct),  $(\text{T}_4)$ . It acts just like the hormone your thyroid gland normally makes. The right dose can make you feel a lot better.

⇒ The two major causes of thyroid disorders are nutrient deficiency and autoimmune disease.

⇒ Iodine is a crucial nutrient for thyroid function.

⇒ Thyroid hormone is rich in iodine and deficiency of iodine can cause both hypothyroidism and goiter. ~~to~~

## Answer No: 02

Polycystic Kidney :-

⇒ Abnormal genes  
Cause Polycystic Kidney disease,  
which means that in most cases,  
the disease runs in families.  
The two main types of Polycystic  
Kidney disease,

⇒ Autosomal dominant Polycystic  
Kidney disease :-

⇒ Signs and symptoms  
of ADPKD often develop between the  
ages of 30 and 40 in the past,  
this type was called adult Polycystic  
Kidney disease, but children can  
develop the disorder.

⇒ only one parent needs to have the  
disease for it to pass to the  
children. if one parent has  
ADPKD each child has a 50  
percent chance of getting the  
disease.

⇒ This form accounts for about 90  
percent of cases of Polycystic  
Kidney disease.

# ⇒ Autosomal recessive Polycystic Kidney disease :-

- ⇒ This type is far less common than is ADPKD.
- ⇒ The signs and symptoms often appear shortly after birth. Sometimes, symptoms don't appear until later in childhood or during adolescence.
- ⇒ Both parents must have abnormal genes to pass on this form of the disease.
- ⇒ If both parents carry a gene for this disorder, each child has a 25 percent chance of getting the disease.

## Complications :-

⇒ With Polycystic Kidney disease.

⇒ High blood pressure :-

⇒ Elevated blood pressure is a common complication of Polycystic Kidney disease.

⇒ Untreated, high blood pressure can cause further damage to your kidneys and increase your risk of heart disease and stroke.

⇒ Loss of kidney function :-

⇒ Progressive

loss of kidney function is one of the most serious complications of polycystic kidney disease.

⇒ The disease have kidney failure by age 50.

⇒ PKD can interfere with the ability of your kidneys to keep wastes from building to toxic levels, a condition called uremia. As the disease worsens, end-stage kidney (renal) failure may result, necessitating ongoing kidney dialysis or a transplant to prolong your life.

⇒ Pregnancy Complications: pregnancy is

successful for most women with polycystic kidney disease. In some cases, however, women may develop a life-threatening disorder called preeclampsia. Those most at risk have high blood pressure before they become pregnant.

⇒ Growth of cysts in the liver: The likelihood

of developing liver cysts for someone with polycystic kidney disease increase with age while both men and women develop cysts. Women often develop larger cysts, female hormones might contribute to cyst development.

⇒ Development of an aneurysm in the brain

A balloon-like bulge in a blood vessel (aneurysm) in your brain can cause bleeding.

(hemorrhage) if it ruptures. People with polycystic kidney disease have a higher risk of aneurysm. People with a family history of aneurysm seem to

⇒ If you develop some of the signs and symptoms of polycystic kidney disease, see your doctor. If you have a first-degree relative - parent, see your doctor to discuss screening for this disorder.

# Answer No: 03

Lithotripsy: Lithotripsy treats kidney stones by sending focused ultrasonic energy or shock waves directly to the stone first located with fluoroscopy (a type of X-ray "move") or ultrasound (high frequency sound waves). The shock waves breaks a large stone into smaller stones that will pass through the urinary system. Because lithotripsy is completely non-invasive therapy, most lithotripsy treatments are performed on an outpatient basis. Although the use of anesthesia does depend on patient physician, recent data suggest that the results of lithotripsy may be improved with the administration of a mild anesthetic when patient has been adequately anesthetized, a computerized X-ray machine is used to pinpoint the location of the stone within the kidney. A series of shock waves is administered to the stone. our treatment.

=> you will be asked to remove any clothing jewelry, or other objects that may interfere with the procedure.

=> if you are asked to remove clothing, you will be give a gown to wear.

- ⇒ An intravenous (IV) line will be inserted in your arm or hand.
- ⇒ You may receive a sedative or anesthetic agent to ensure that you remain still and pain-free during the procedure.
- ⇒ After the sedation has taken effect, you will be positioned on a water-filled cushion or immersed in a water-filled tub.
- ⇒ After the stone(s) has been located with fluoroscopy or ultrasound, you will be positioned for the most direct access to the stone.
- ⇒ If you are awake during the procedure, you may experience a light tapping feeling on your skin.

Answer NO: 04

Medical procedure:

Amniotomy: An incision created to accelerate labor.

Androtomy: Dissection of the human body.

Bilateral cingulotomy: psychosurgery, treatment for depression and addiction.

Bronchotomy: A procedure that ensures there is an open airway between a patient's lung/s and the outside world.

Clitoridotomy: plastic surgery of the clitoral hood.

Coeliotomy: A large incision through the abdominal wall to gain access into the abdominal cavity.

Colpotomy: Extraction of blood from the pouch of Douglas posterior to the vagina through a needle.

Cordotomy: procedure that disables selected pain-conducting

tracts in the spinal cord in order to achieve loss of pain and temperature perception.

Craniotomy: A bone flap is temporarily removed from the skull to access the brain.

Cricothyrotomy: An incision made through the skin and cricothyroid membrane to establish a patent air way during certain life-threatening.

Laparotomy: large incision through the abdominal wall to gain access into the abdominal cavity.

letter words that's end in otomy.

- ⇒ laparotomy
- ⇒ phlebotomy
- ⇒ craniotomy
- ⇒ epissiotomy
- ⇒ keratotomy
- ⇒ trichotomy
- ⇒ ovariectomy
- ⇒ arthroscopy

# Answer No.: 05

## Urinary tract infection:.

A urinary tract infection (UTI) is an infection in any part of your urinary system. Kidneys, bladder, ureters, and urethra.

## Symptoms:

- => A strong, persistent urge to urinate
- => A burning sensation when urinating
- => passing frequent, small amounts of urine.
- => urine that appears cloudy.
- => urine that appears red, bright pink or cola-colored - a sign of blood in the urine.
- => strong-smelling urine
- => pelvic pain, in women - especially in the center of the pelvis and around the area of the pubic bone.

## Type of urinary tract infection

# Types of urinary tract infection

Parts of urinary tract affected

Signs and symptoms

Kidneys (acute pyelonephritis)

upper back and side (flank) pain  
High fever  
shaking and chills  
Nausea  
vomiting

Bladder (cystitis)

pelvic pressure  
lower abdomen discomfort  
frequent, painful urination

Blood in urine.

Causes :-

Urinary tract infection typically occur when bacteria enter the urinary tract through the urethra and begin to multiply in the bladder.

⇒ Although the urinary system is designed to keep out such microscopic invaders, these defenses sometime fail.

When that happens, bacteria may take hold and grow into full-blown infection in the urinary tract.

## Complications:-

⇒ of a UTI may include.

- ⇒ Recurrent infection, especially in women who experience two or more UTIs in a six month period or four or more within a year.
- ⇒ Permanent kidney damage from an acute or chronic kidney infection due to an untreated UTI.
- ⇒ Increased risk in pregnant women of delivering low birth weight or premature infants.
- ⇒ Urethral narrowing (stricture in men from recurrent urethritis, previously seen with gonococcal urethritis).

## Prevention:—

⇒ Drink Plenty of liquids especially water:

⇒ Drinking water helps dilute your urine and ensures that you'll urinate more frequently, allowing bacteria to be flushed from your urinary tract before an infection can begin.

⇒ Drink Cranberry juice!—

⇒ Although studies are not conclusive that cranberry juice prevents UTIs, it is likely not harmful.

⇒ Empty your bladder soon after intercourse:—

Also, drink a full glass of water to help flush bacteria.