#1- With 5. regard to absorbed doses , which of the following is correct :

absorbed doses , which of

absorbed doses , which ofasdasd/

sf.safj a lskkkk kndfkgjm , lkdfjghkk

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asdf  
fgdfg

#

a) A typical absorbed dose for 3 minutes of fluoroscopy screening can be up to 150 mGy.\*

b) A typical absorbed dose for a PA chest film is 0.015 mGy.

c) Absorbed doses are normally lower than effective doses

d) The typical absorbed foetal dose of a barium enema in a pregnant patient is higher than the typical absorbed adult dose of AP abdomen.

e) The Typical Absorbed Dose Of A Lateral Lumbar Spine Is 12mGy.

#

2- Regarding staff protection, the following is true :#

a) 12 cm of solid brick will provide equivalent protection of 1 mm of lead.

b) An under-couch tube is preferable to an over-couch tube.\*

c) Lead aprons generally provide equivalent protection of 2.5–5 mm lead.

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#17- The following contrast medium is not low osmolar non -ionic monomer:#

a) Iopamidol ( niopam)

b) Iomeprol (lomeron)

C) Isovist.\*

D) Iopromide (ultravist)

E) Iohexol (0mnipague)

#4- The following is not a contraindication of barium enema:#

a) Melena.\*

b) Toxic mega colon

c) Pseudomembranous colitis

d) Recent rectal biopsy

e) Recent barium meal

#5- Regarding CT of the abdomen the following is not true:#

a) The Normal Density Of The Liver Is 60+/- 5HU

b) The spleen commonly enhances heterogeneously

c) Hepatic parenchyma enhances by around 40 HU during arterial portography.\*

d) Peak hepatic enhancement is at 50-70 sec after contrast injection into a peripheral vein

e) Peak hepatic enhancement start 40 secs after injection into the superior mesenteric artery.

#6- In CT scan of the thorax the following is not true : #

a) Air is rarely seen in the esophagus.\*

b) Scan is performed in suspended respiration

c) Short scanning time is important

d) The oblique fissure may be seen

e) Filling defect in the SVC are seen frequently in normal patients after contrast enhancement

#7- One of the following does not indent the barium filled esophagus in the thorax: #

a) Aortic arch

b) Left main stem bronchus

c) Left atrium

d) Azygous vein.\*

e) Aberrant right subclavian artery.

#8- In arthrography which of the following is true: #

a) Control film are not usually recommended prior to the procedure

b) Joint effusion is a contraindication because of risk of introducing sepsis

c) Negative contrast medium is absorbed from joint within a few hours

d) Delayed films may be useful in the investigation of suspected loose body.\*

e) Adrenaline should not be added to contrast medium

#9- Regarding imaging of the breast which of the following is true: #

a) Ductography involve the injection of 5 ml of a water soliable contrast medium into a dilated duct

b) The nipple should be seen in profile in the standard mammographic views of the breast.\*

c) The standard mammography film series comprises a cranio-caudal view and straight lateral view of each breast

d) Ultrasound should be performed with a low frequency 3,5 mhz tranducer

e) Compression should not be used during mammography when cysts are suspected.

#10- Regarding angiography the following is not true : #

a) The hole in the vessels wall produced by a 6 french catheter has an area four times larger than that of 3 french catheter

b) Sheath are sized according to the largest sized catheter that they will accommodate

c) Single wall areterial puncture require a two part needle

d) The catheter tip should be positioned about 5-10 cm above the aortic bifurcation in lumber aortography.\*

e) The most reliable guide to the position of the common femoral artery for percutaneous puncture is the site of maximal pulsation

#11- Regarding hystrosalpingography (HSG) the following is not true: #

a) It is contraindicated if there is history of untreated salpingitis

b) Pain may persist for up to 1-2weeks after the procedure

c) Venous intravasation can occur

d) Pethidine can be helpful if given as analgesic before the procedure.\*

e) It is contraindicated during menses

#12- Maximum density of the nephrogram is dependent on all of the following except : #

a) Degree of dehydration.\*

b) Peak plasma level of contrast media

c) Glomerular filtration

d) Renal blood flow

e) Absorption of water and sodium by the proximal tubules

#13- The lordotic view of the chest may be used to demonstrate the following: #

a) The left middle lobe

b) The right middle lobe

c) The left heart border

d) A pericardial effusion

e) The apices of the lungs.\*

#14- Regarding barium enema investigation of large bowl the following is not true: #

a) A preliminary abdominal film is never required.\*

b) Bowel perforation is more likely if an inflated balloon catheter is used

c) Water intoxication may occur

d) Turning the patient supine with caecum full of barium encourages ileal reflux

e) Over distension of bowel with air may obscure mucosal lesions

#15- The following is true of imaging the pancreas : #

a) Water is an appropriate oral contrast media for CT

b) The pancreas parenchyma enhances maximally during the portal venous phase.\*

c) The normal duct measures up to 2mm in diameter in the body of the pancreas on ultrasound

d) The normal duct measure up to 6,5mm at the head of the pancreas at ERCP

e) The number of side branches of the pancreatic duct opacifying at ERCP decreases with age

#16- Regarding Meckel diverticulum radionuclide scan imaging which of the following is true: #

a) Must include stomach

b) The abdomen and pelvis should be imaged

c) A lateral view should be obtained

d) An erect view is helpful.\*

e) A post micturition lateral view is the final view.

#17- Which one of the following is not a complication of ERCP : #

a) Allergic reaction

b) Acute pancreatitis

c) Pancreatic pseudocyst.\*

d) Rupture of the esophagus

e) Aspiration pneumonitis

#18- The following statement is not true: #

a) In GA 67 scintigraphy uptake within the bowel is often a normal feature

b) Tc 99 tin colloid is taken up in the liver by the hepatocytes.\*

c) In colloid scintigraphy focal liver disease may be mimicked by overlying breast tissue

d) In Normal Cholescintagraphy The Gallbladder Should Be Visualized By 1hr

e) Tricyclic antidepressant should be stopped prior to a radionuclide m-iodobenzyl guanidine (MIBG) scan for pheochromocytoma

#19- Generalized convulsions following injection of contrast media can be treated with : #

a) Adrenaline

b) Valium.\*

c) Calcium gluonate

d) Buscopan

e) Vitamin D high dose.

1. W20- #Which of the following statements is correct? #

(a) The supraspinatus tendon passes above the acromion process.

(b) The clavicle has a medullary cavity.

(c) The rhomboid fossa marks the site of origin of the costo-clavicular ligament. \*

(d) The clavicle is the last bone to ossify.

(e) A distance of more than 5 mm between the humerus and the acromion indicates likely supraspinatus tendon impingement.

2. Rr21- #Regarding the upper limb which of the following statements is false: #

(a) The radial groove is situated in the humerus.

(b) The capitulum articulates with the ulna. \*

(c) The ligament of Struthers may compress the median nerve.

(d) The capitulum is the first secondary ossification center to appear in the elbow.

(e) A prominent posterior fat pad in a lateral radiograph of the elbow is seen in cases of joint effusion.

3. C222- #Concerning the wrist and carpus, which of the following statements is false: #

(a) The mid-carpal joint does not communicate with the radiocarpal joint.

(b) On a lateral wrist radiograph the distal radius has a slight volar tilt.

(c) The lunate articulates proximally with the radius and distally with the capitate.

(d) The flexor retinaculum is attached to the pisiform, hook of hamate, scaphoid tubercle and ridge of the trapezium.

(e) Flexor carpi-radialis attaches to the pisiform. \*

#23- In skeletal imaging which of the followings is false: #

(a) Phased array surface detection coils greatly improve the signal to noise ratio in MRI of bone joint and soft tissue.

(b) Abnormalities of cortical bone and calcification are usually not detected by MRI.

(c) Meniscal abnormalities of the knee are demonstrated on T2- weighted scans better than T1.

(d) A fat fluid level within the suprapatellar bursa of the knee indicates a fracture.

(e) Bone scans using 99mTc MDP are very specific for pathology. \*

24- #In the lower limb, which of the following statements is correct: #

(a) The rectus femoris arises from the anterior superior iliac spine.

(b) Gracilis, sartorius and semitendinosus insert into the medial condyle of the tibia. \*

(c) The adductor magnus inserts along the linea aspera, the medial supracondylar line and the adductor tubercle of the lateral femoral condyle.

(d) The adductor hiatus interrupts the distal attachment of the adductor longus muscle

(e) The biceps femoris attaches to the lateral condyle of the femur

#25- In the knee joint, which of the followings is false: #

(a) The synovium lining the joint is extracapsular. \*

(b) A Baker’s cyst is an inflamed or swollen medial gastrocnemius – semimembranosus bursa.

(c) The lateral collateral ligament is separated from the capsule by the popliteus tendon.

(d) The anterior cruciate ligament passes from the anterior intercondylar area of the tibia to the medial surface of lateral femoral condyle

(e) The medial collateral ligament is a flattened band that blends posteriorly with the fibrous capsule.

#26- Concerning Electrons, which of the followings is correct: #

a. In the Bohr model of atomic structure electrons orbit the nucleus \*

b. The electron has +1 charge

c. The binding energy of the L-shell is higher than the K-shell

d. The K-shell can hold 20 electrons

e. Electrons have a greater mass than protons

#27- Regarding the cathode of the X-ray tube, which of the followings is false: #

a. Is commonly made of tungsten

b. Has a high melting point

c. Has a high resistance

d. Is positively charged in relation to the anode \*

e. Can exceed temperatures of 2200°C

#28- Concerning the anode, which of the followings is correct: #

a. It is positively charged relative to the cathode \*

b. Molybdenum is used in most X-ray tubes

c. Rhodium is often added to tungsten to reduce pitting and cracking that can be caused by overheating

d. The distance between the cathode and anode affects the quality of the X-rays produced

e. 90% of the energy from the electrons striking the anode is dissipated as heat

#29- Regarding pediatric radiology, which of the followings is false: #

a. Grids with a ratio higher than 1:8 should not be used

b. Immobilization may be required

c. High-attenuation materials such as carbon fiber should be used for table tops \*

d. The risk from X-rays to children is greater than in adults

e. Additional filtration may be required

#30- Concerning imaging of the ankle and foot, which of the followings is correct: #

(a) Bohler’s angle is usually about 18° normally.

(b) Congenital tarsal coalitions are best visualized using oblique radiographs with the foot internally rotated.

(c) On ultrasound, tendons are echo poor.

(d) In the AP view of the foot the medial margin of the base of the second metatarsal should be in line with the medial margin of the intermediate cuneiform. \*

(e) A fracture through the base of the fifth metatarsal is usually longitudinal to the long axis of the metatarsal.

#31- Regarding staff protection, the following is true and nice :#

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d) Lead aprons will provide adequate protection from the primary beam.

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d) Lead aprons will provide adequate protection from the primary beam.

e) Minimising exposure time and maximising distance from the x-tube will reduce the dose.

f) Minimising exposure time and maximising distance from the x-tube will reduce the dose. \*

#3- The following contrast medium is not low osmolar non -ionic monomer:#

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