

Q.No. 1. Which of the following is the least likely cause of Limping Child aged 1–4 Years

- (a) Developmental dysplasia of hip
- (b) Idiopathic chondrolysis of hip
- (c) Septic arthritis
- (d) Transient synovitis of hip

**B**

Q.No. 2. Which of the following is the least likely cause of Limping Child aged 4-10 Years

- (a) Osteomyelitis
- (b) Legg-Perthes disease
- (c) Diskitis
- (d) Osteochondritis dissecans

**C**

Q.No. 3. Which of the following is the least likely to be an Acquired Syndrome with Increased Bone Density

- (a) Renal osteodystrophy
- (b) Paget disease of bone
- (c) Myelofibrosis
- (d) Melorheostosis

**D**

Q. No.4 which of the following is least likely to be noted in a Battered child syndrome

- (a) Multiple asymmetric fractures in similar stages of healing
- (b) Exuberant callus formation at fracture sites
- (c) Avulsion fracture of ligamentous insertion
- (d) Separation of distal epiphysis

**A**

Q. No. 5 Which of the following is not commonly seen in hyperparathyroidism.

- (a) Subperiosteal Bone Absorption
- (b) Pseudo widening of joint space (subchondral)
- (c) "Intracortical tunnelling"
- (d) Clear distinction between inner & outer table.

**D**

Q. No.6. The radiological features of Hypertrophic osteoarthropathy include all the following except

- (a) Cortical thinning
- (b) Symmetric metadiaphyseal periosteal reaction
- (c) Solid/ linear or layered Periosteal reaction
- (d) Epiphyseal region

**D**

Q. No. 7 MRI findings in Bucket-handle Tear of meniscus include all except

- (a) "absent bow-tie" sign (SAG image)
- (b) "fragment-in-notch" sign (COR image)
- (c) cleft" sign ← tear through body on SAG view
- (d) double PCL" sign (SAG image)

**C**

Q. No.8. Progressive multifocal leukoencephalopathy shows following MRI features except

- (a) Bilateral white matter lesions
- (b) Involvement of cortical gray matter
- (c) Ventricular dilatation
- (d) Gray matter lesions in thalamus + basal ganglia

**B**

Q. No. 9 Progressive multifocal leukoencephalopathy shows following MRI features except

- (a) Leptomeningeal venous angiomas confined to pia mater
- (b) Cortical hemiatrophy beneath meningeal angioma
- (c) Most commonly frontal lobe involvement
- (d) "tram track" gyriform cortical calcifications

**C**

Q. No. 10. Retinoblastoma shows following CT features except

- (a) Solid smoothly marginated lobulated retrolental hyperdense mass of endophytic type
- (b) Partial punctate / nodular calcification
- (c) No Contrast enhancement
- (d) Dense vitreus

**C**

- Q. No. 11 Tolosa Hunt syndrome shows following MRI features except  
 (a) Loss of Signal intensity of orbital fat  
 (b) Enlargement of the cavernous sinus with convex outer margin  
 (c) No extension of Lesion into orbital Apex through superior orbital fissure. **C**  
 (d) Contrast enhancement
- Q. No. 12. Sinusoidal Glomus Tumor shows following CT features except  
 (a) Soft tissue mass with strong enhancement  
 (b) Soft tissue mass with weak enhancement **B**  
 (c) Extension into orbits  
 (d) Extension into intracranial compartment and destruction of adjacent bone
- Q. No. 13. Askin Tumour shows following CT features except  
 (a) Large mass with only intrathoracic component  
 (b) Large mass with intrathoracic & extrathoracic components  
 (c)  $\pm$  pleural, pericardial & diaphragmatic extension or involvement **A**  
 (d)  $\pm$  vertebral & spinal extension or involvement
- Q. No. 14. All are MRI Differentiation features between benign & Malignant breast Lesions except  
 (a) Smooth Morphology in Benign and irregular in Malignant Lesions **D**  
 (b) Continuous rise of Kinetics in benign and Rapid rise in Malignant lesions  
 (c) Homogeneous Enhancement in Benign and heterogeneous enhancement in malignant lesions  
 (d) Low Signal on T1W/ T2W in Benign and High Signal on T1W/ T2W in Malignant lesion
- Q. No 15. Key Diagnostic imaging features of Constrictive Pericarditis includes all except  
 (a) Pericardial thickening to 4 mm  $\pm$  1 mm in reversible constrictive pericarditis  
 (b) Thinning of pericardium to 2 mm  $\pm$  1 mm in end-stage irreversible chronic fibrosing pericarditis  
 (c) No reflux of contrast into coronary sinus **C**  
 (d) sigmoid-shaped curvature of interventricular septum toward left
- Q. No. 16. Left Atrial Myxoma shows following features except  
 (a) Pulmonary venous hypertension (b). Enlargement of LA **C**  
 (c) Enlargement of atrial appendage (d). Ossific lung nodules
- Q. No. 17. MRI has emerged as a modality of choice for evaluation of cardiomyopathy due to following except  
 (a) Unique capability of assessment of cardiac anatomy, biventricular function & volumes  
 (b) No tissue characterization  
 (c) Can help in identification of the etiology and predict prognosis. **B**  
 (d) Detects regional wall motion abnormalities
- Q. No. 18. Main Duct (Intraductal papillary Mucinous neoplasm) IPMN shows all except  
 (a) Hyperechoic filling defect on sonography  
 (b) Hyperdense filling defect within dilated duct  
 (c) T2-hypointense within dilated duct **D**  
 (d) Non dilated entire main pancreatic duct
- Q. No. 19. Focal Fat-Sparing in Diffuse Fatty Liver shows all the following features except  
 (a) Geographic configuration  
 (b) Well delineated margins  
 (c) Contrast enhancement similar to normal liver **B**  
 (d) Pseudolesion / NO mass effect
- Q. No. 20. Contrast enhanced MRI findings in Cirrhosis include all the following except  
 (a) Enhancement of liver fibrosis on T1WI  
 (b) No enhancement of usually ill-defined arteriportal shunts  
 (c) Progressive enhancement on delayed images with peak during late venous + equilibrium phases  
 (d) Occasional arterial hypervascularity within focal fibrosis **B**

Q. No. 21. Caroli Disease is a rare congenital autosomal recessive disorder and includes all the following findings except

- (a) Segmental saccular > fusiform beaded dilatation of intrahepatic bile ducts extending to periphery of liver up to 5 cm in diameter
- (b) ± filling defects ← intraductal calculi
- (c) Strictures
- (d) Non-communicating hepatic abscesses

**D**

Q. No. 22. Transient Hepatic Parenchymal Enhancement is the attenuation difference of liver appearing during dynamic bolus-enhanced CT and it results due to all except

- (a) Presence of abnormal vessels coursing through lesion
- (b) Patchy area of transient high attenuation during early arterial phase
- (c) Fading with return to normal during portal venous phase
- (d) Peripheral location, triangular shape, straight margins

**A**

Q. No. 23. Duodenal Atresia shows all except

- (a) "Double bubble" sign = gas-fluid levels in duodenal bulb + gastric fundus
- (b) Total absence of intestinal gas in small / large bowel
- (c) Colon of normal calibre
- (d) Dilated Colon

**D**

Q. No. 24. CT findings in most cases of Colonic Diverticulosis are

- (a) Rounded outpouchings containing air ± contrast material
- (b) Circumferential sawtooth-like thickening of colonic contour
- (c) Both A & B
- (d) None of the above

**C**

Q. No. 25 Abdominal Fat Necrosis on CT can be commonly noted in all except

- (a) Epiploic appendagitis
- (b) Omental infarction
- (c) Encapsulated fat necrosis
- (d) Trauma

**D**

Q. No. 26 Misty Mesentery Sign (subtle increased attenuation in the mesentery) at CT can be seen in

- (a) Normalcy (common finding)
- (b) Mesenteric panniculitis
- (c) Edema: hypoalbuminemia, cirrhosis, heart failure, portal vein thrombosis
- (d) Malignancy : pancreatic, colonic carcinoma, carcinoid, GIST
- (e) All of the above

**E**

Q. No. 27 CECT Abdomen findings in Mural stratification of Intestinal tract are all except

- (a) Contrast enhancement of inner layer ( mucosa + submucosa)
- (b) Nonenhanced interposed layer of submucosa with various degrees of attenuation
- (c) Contrast enhancement of outer layer / muscularis propria
- (d) No contrast enhancement of outer layer / serosa

**D**

Q. No. 28. The ultrasound / Doppler features of Acute Rejection of Renal Transplant does not include

- (a) Decrease in Renal Volume
- (b) Initially decrease in resistive index (? Autoregulatory Mechanism))
- (c) Increase in resistive index > 0.80 (with increasing severity of rejection)
- (d) Reversal of diastolic flow

**A**

Q. No. 29. Which of the following statement about CT imaging of Xanthogranulomatous Pyelonephritis is not correct

- (a) Enlargement of kidney
- (b) Obstructive staghorn-like calculus
- (c) Hydronephrosis + abscesses
- (d) No extension into perinephric space or retroperitoneum

**D**

Q. No. 30 Which of the following statements about Fournier gangrene / fulminant necrotizing fasciitis is not correct

- (a) CT is the modality of choice for evaluation
- (b) Should scan pelvis (not whole abdomen) to find source of infection
- (c) Gas in scrotal wall + perineum is noted on CT
- (d) Scrotal skin thickening + normal testes is noted on CT

**B**

Q. No. 31 Ultrasound features in acute epididymitis usually don't include

- (a) Hypoechoic epididymis relative to testis
- (b) Enlarged heterogeneous epididymis
- (c) Thinning of tunica albuginea in severe infection.
- (d) Reactive hydrocele ± thickening of scrotal wal

C

Q. No. 32. Which of the following is not a sonographic feature in Arteriovenous Fistula of Kidney

- (a) focal area of aliasing / color saturation
- (b) ↑ flow velocity + U resistance in feeding artery
- (c) Decreased flow in Renal artery
- (d) arterial pulsations in draining vein

C

Q. No. 33. Which of the following is not usually a CTImaging feature in adrenocortical adenoma

- (a) Lipid-rich adenoma < 10 HU
- (b) Lipid-poor adenoma > 10 HU
- (c) Absolute percentage washout > 40%
- (d) Relative percentage washout ≤ 60%

D

Q. No.34. Which of the following is not a cause of Vicarious Contrast Material Excretion during IVP

- (a). Uremia
- (b) Pyelovenous backflow
- (c) Spontaneous urinary extravasation
- (d) Acute unilateral obstruction

B

Q. No. 35 Pseudokidney Sign is a sonographic mass of reniform appearance with a central hyperechoic region surrounded by a hyperechoic region and is not usually found in the

- (a) Intussusception
- (b) Midgut volvulus
- (c) Crohn disease
- (d) Ulcerative colitis

D

Q. No. 36 which adrenal mass/ masses exhibit Small Foci of Fat on Imaging.

- a) Adrenocortical adenoma with myelolipomatous changes
- b) Adrenocortical carcinoma
- c) Pheochromocytoma
- d) All of the above

D

Q No. 37 Which is the commonest Primary retroperitoneal sarcoma to exhibit extensive necrosis and contiguous involvement of a vessel

- a) Retroperitoneal liposarcoma
- b) Leiomyosarcoma
- c) Both A & B
- d) None of the above

B

Q. No. 38. Which is the commonest Primary retroperitoneal sarcoma to exhibit contrast enhancement of thick irregular nodular septa on Cross sectional Imaging

- (a) Retroperitoneal liposarcoma
- (b) Leiomyosarcoma
- (c) Both A & B
- (d) None of the above

A

Q. No. 39. Which is most common Retroperitoneum malignancy noted on Cross sectional imaging

- (a) Lymphoma
- (b) Retroperitoneal liposarcoma
- (c) Leiomyosarcoma
- (d) Malignant fibrous histiocytoma

A

Q. No. 40. Which one of the following statement is incorrect, regarding ultrasound findings in a patient with suspected Pelvic congestion Syndrome?

- (a) Multiple tortuous pelvic veins > 4–6 mm in diameter around uterus + ovaries
- (b) Slow (≤ 3 cm/s) / reversed (caudal) flow
- (c) Dilated arcuate vein in myometrium
- (d) No polycystic changes of Ovaries.

D

Q. No. 41. Which one of the following feature about MRI of Cervical Carcinoma is incorrect?

- (a) Mass isointense on T1WI
- (b) Size of tumor is not accurately depicted on T2WI
- (c) Mass is hyperintense on T2WI compared with fibrous stroma
- (d) Early contrast enhancement on fat-saturated T1WI

**B**

Q. No. 42. Which one of the following MR Imaging features of Focal Adenomyosis is incorrect?

- (a) Foci of central low-intensity spots / linear striations on T2WI imaging in 50% cases
- (b) Focal thickening of junctional zone > 12 mm.
- (c) Oval myometrial mass with indistinct margins of primarily low SI on all sequences.
- (d) Widening of the junctional zone from 8 mm up to 12 mm

**A**

Q. No. 43. Which one of the following statements about Amnionity & Chorionity is incorrect?

- (a) Only monozygotic twins can give rise to monochorionic monoamniotic pregnancies
- (b) All monoamniotic twins must also be monochorionic
- (c) All dizygotic twins must be dichorionic and diamniotic
- (d) Two thirds of twins are monozygotes

**D**

Q. No. 44. Which of the antenatal sonographic diagnosis is least likely to prompt cardiac evaluation?

- (a) Hydrocephalus
- (b) Esophageal atresia
- (c) Congenital talipes equinovarus
- (d) Omphalocele

**C**

Q. No. 45. Congenital heart disease is most commonly seen in which syndromes.

- (a) Down syndrome
- (b) Trisomy 18
- (c) Trisomy 13
- (d) Turner syndrome

**B**

Q. No. 46. Which of the following is a rare cause of pulmonary hypoplasia?

- (a) Primary/ idiopathic pulmonary hypoplasia
- (b) Pulmonary hypoplasia due to intrathoracic lung compression
- (c) Pulmonary hypoplasia due to extrathoracic lung compression
- (d) Pulmonary hypoplasia due to dysplasia of thoracic cage

**A**

Q. No. 47. Which of the statements regarding isolated mild ventriculomegaly in foetus is not correct?

- (a) Most common brain anomaly on prenatal sonograms
- (b) Associated structural anomalies like periventricular leukomalacia, subependymal / germinal matrix haemorrhage, partial agenesis of corpus callosum are seen in majority of these cases.
- (c) MR is recommended to diagnose associated structural anomalies
- (d) Most of these patients with isolated mild ventriculomegaly have normal motor & intellectual function at  $\geq 12$  months of age

**B**

Q. No. 48. Which of the following small-for-gestational age foetus (SGA) is most likely to benefit from intensive management?

- (a) Foetus of appropriate growth which is misdiagnosed as small
- (b) Small normal foetus / constitutionally small foetus
- (c) Small abnormal foetus / primary growth failure associated with karyotype anomaly / fetal infection
- (d) Dysmature foetus / IUGR / growth failure as a result of uteroplacental insufficiency

**D**

Q. No. 49 Which of the following is not an Ultrasound Finding Diagnostic of Pregnancy Failure as per society of Radiologists Ultrasound Consensus Criteria (by using transvaginal ultrasound).

- (a) No heartbeat with CRL of  $\geq 7$  mm
- (b) No embryo with mean sac diameter of  $\geq 25$  mm
- (c) No heartbeat  $\geq 1$  weeks after appearance of gestational sac without yolk sac
- (d) No heartbeat  $\geq 11$  days after appearance of gestational sac with yolk sac

C

Q. No. 50 which of the following is a less common cause of Pelvic Pain in a Young Woman.

- (a) Haemorrhagic ovarian cyst
- (b) Pelvic inflammatory disease (PID)
- (c) Ectopic pregnancy
- (d) Torsion of ovary

D

Q. No. 51 What is the typical imaging appearance of papillary craniopharyngiomas?

- a) Mostly cystic with calcification
- b) mostly solid with calcification
- c) mostly cystic without calcification
- d) mostly solid without calcification

D

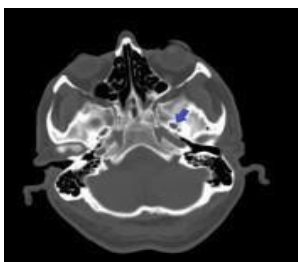
Q. No. 52 What is the most likely diagnosis :



- a) Double aortic arch
- b) Aberrant left pulmonary artery
- c) Esophageal ulcer
- d) Schatzki Ring

B

Q. No. 53 Which of the following structure doesn't pass through the marked foramen:



- a) Otic ganglion
- b) Mandibular division of V3
- c) Accessory meningeal artery
- d) Middle meningeal artery

D

Q. No. 54 Venetian blind artifact is associated with :

- a) MOTSA
- b) Susceptibility weighted imaging
- c) fMRI
- d) CT angiography

A

Q. No. 55 In the given post contrast axial CT image, which is the most likely diagnosis among the following. Patient has history of infertility treatment,

- a) PCOD
- b) Ovarian hyperstimulation Syndrome
- c) Hemorrhagic ovarian cysts
- d) Ovarian teratoma

**B**



Q. No. 56 Which of the following is not a typical feature of GCT?

- a) Epiphysis must be closed.
- b) Must be an epiphyseal lesion and abut the articular surface.
- c) Must be well defined with non-sclerotic margins.
- d) Must be central in location.

**D**

Q. No. 57 Choose the correct option :



- a) Greenstick fracture
- b) Angulated fracture
- c) Torus fracture
- d) Growth plate fracture

**C**

Q. No. 58 All the following statement are true regarding the PCPNDT act except :

- a) All PCPNDT related documents and images to be preserved for 12 years
- b) Written consent is required for invasive procedures like amniocentesis, chorionic villous sampling and is documented using form G
- c) Form A is used for Registration of imaging centre or renewal of registration
- d) Form F – Form for maintenance of records by genetic clinic / imaging centre

**A**

Q. No. 59 BLUE Protocol is used for:

- a) Lung imaging in emergency
- b) Abdominal trauma
- c) Emergency obstetric conditions
- d) Imaging in unconscious patient

**A**

Q. No. 60 Schuller's view is used for:

- a) Orbit roof
- b) Maxillary sinus
- c) Petrous temporal bone.
- d) Nasal bones

**C**