

# INI CET 2024 Solution

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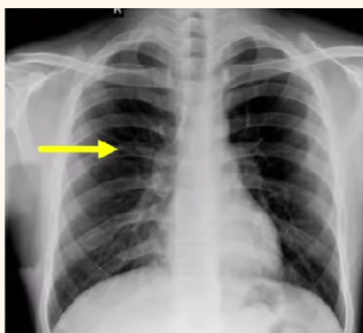
**Ques 1. A patient with a stab injury to the chest. Supine X-ray given.  
Diagnosis:**



**a. Right hemothorax**

**Explanation:** On a supine X-ray, hemothorax appears as a diffuse opacity on the affected side due to blood layering along the posterior chest wall.

**Ques 2. The arrow is pointing to:**



**c. Posterior rib**

**Explanation:** The posterior ribs appear more horizontal on a chest X-ray, while the anterior ribs are more vertical and arch downward.

**Ques 3. Mt Fuji sign is seen in:**

**c. Tension pneumocephalus**

**Explanation:** The Mt Fuji sign is seen in cases of tension pneumocephalus where there is a separation of the frontal lobes due to air trapped under tension.

**Ques 4. Diagnosis:**



**c. Chronic osteomyelitis**

**Explanation:** Chronic osteomyelitis typically presents with signs of bone destruction, sclerosis, and sometimes sinus tracts on imaging.

**Ques 5. True about CT:**

**a. Water has HU 0**

**Explanation:** Hounsfield Units (HU) for water are standardized at 0, providing a baseline for CT density measurements.

**Ques 6. Contrast that can be given in patients with chronic kidney disease:**

**c. Ultrasound contrast**

**Explanation:** Ultrasound contrast agents are generally safer for patients with renal impairment compared to iodinated or gadolinium-based contrasts.

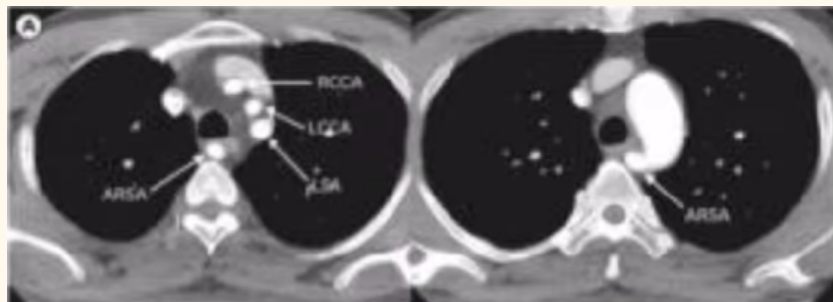
**Ques 7. Diagnosis:**



**a. Patella fracture**

**Explanation:** Patella fractures are identified on Xray by the presence of a break in the continuity of the patellar bone.

**Ques 8. Anatomic variation seen in this CT:**



**c. ARSA (Aberrant Right Subclavian Artery)**

**Explanation:** ARSA is a common vascular anomaly where the right subclavian artery arises aberrantly from the aortic arch and travels behind the esophagus.

**Ques 9. Which of the following is not typically seen in allergic rhinitis?**

**a. Otto veraguth folds**

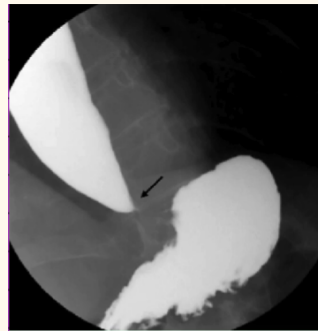
**Explanation:** Otto veraguth folds are not associated with allergic rhinitis; they are more related to aging and neurological conditions.

**Ques 10. What is the most likely diagnosis for a 13yearold boy presenting with rightsided nasal obstruction and recurrent epistaxis for the past 6 months?**

**d. Antrochoanal Polyp**

**Explanation:** Antrochoanal polyps are benign nasal polyps that commonly cause unilateral nasal obstruction and recurrent nosebleeds in adolescents.

**Ques 11. Symptoms indicate which condition: weight loss, dysphagia, halitosis, sign on Xray?**



**a. Achalasia**

**Explanation:** Achalasia presents with progressive dysphagia, weight loss, and sometimes halitosis due to food stasis in the esophagus.

**Ques 12. Which procedure should not be performed in an 8yearold with bilateral sensorineural hearing loss?**

**a. Adenoidectomy with grommet insertion**

**Explanation:** Adenoidectomy with grommet insertion is not indicated for sensorineural hearing loss as it addresses middle ear conditions, not inner ear problems.

**Ques 13. ER, PR are what type of markers?**

**c. Predictive**

**Explanation:** Estrogen Receptor (ER) and Progesterone Receptor (PR) are predictive markers used to predict the response to hormone therapy in breast cancer.

**Ques 14. Purpose of Downes criteria in neonatology assessment?**

**a. To assess respiratory distress syndrome (RDS)**

**Explanation:** Downes' score is used to evaluate the severity of respiratory distress in newborns.

**Ques 15. Declaration of Oslo, 1970 primarily concerned with:**

**a. Torture**

**Explanation:** The Declaration of Oslo is a set of ethical guidelines regarding the use of torture and other inhumane treatments.

**Ques 16. Which is NOT a risk factor for cholangiocarcinoma?**

**a. Hepatitis B (hepatitis B virus infection)**

**Explanation:** While chronic liver conditions like Hepatitis B are risk factors for hepatocellular carcinoma, they are not strongly associated with cholangiocarcinoma.

**Ques 17. Which is NOT included in criteria to diagnose autism?**

**a. Cognitive delays**

**Explanation:** Autism Spectrum Disorder is primarily diagnosed based on communication deficits, social interaction challenges, and repetitive behaviors, not cognitive delays.

**Ques 18. Fluid of choice in resuscitation in children?**

**a. 5% dextrose and normal saline**

**Explanation:** For resuscitation, isotonic solutions like normal saline are preferred; 5% dextrose with normal saline maintains glucose levels while providing volume.

**Ques 19. Non Spreading variety of vitiligo?**

**a. Focal**

**Explanation:** Focal vitiligo is characterized by one or a few areas of depigmentation that do not spread.

**Ques 20. What is the preferred contrast agent for patients with chronic kidney disease?**

**c. Ultrasound (US)**

**Explanation:** Ultrasound contrast agents are generally safer for patients with renal impairment compared to iodinated or gadolinium based contrasts.

**Ques 21. Procedure not recommended in an 8yearold with bilateral sensorineural hearing loss?**

**a. Adenoidectomy with grommet insertion**

**Explanation:** This procedure is indicated for middle ear issues, not sensorineural hearing loss, which affects the inner ear or auditory nerve.

**Ques 22. A 30 year old female patient with chronic hypertension is experiencing postpartum hemorrhage (PPH).**

**b. Methyl ergotamine**

**Explanation:** Methyl ergotamine is used to treat postpartum hemorrhage due to its strong uterotonic effect, but caution is needed in hypertensive patients.

**Ques 23. A 36 week pregnant female presents with hypertension, visual disturbances, headache, and proteinuria (3+).**

**d. IV labetalol, magnesium sulfate**

**Explanation:** This combination is used to manage severe preeclampsia, addressing hypertension with labetalol and preventing seizures with magnesium sulfate.

**Ques 24. A mother with O negative blood group and a father with B positive blood group have a baby.**

**a. The baby has O positive blood group and antibodies negative.**

**Explanation:** The baby's blood group can be O positive due to genetic inheritance, and the antibodies might be negative if there's no Rh incompatibility effect.

**Ques 25. Which mineral is important for fertility in males?**

**a. Zinc**

**Explanation:** Zinc plays a crucial role in male fertility, affecting sperm production and motility.

**Ques 26. What is the correct dose regimen for antenatal corticosteroids?**

**a. Dexamethasone 6 mg every 12 hours, 4 times**

**Explanation:** This regimen is used to promote fetal lung maturity in preterm labor situations.

**Ques 27. An 18 week fetus was suspected to have neural tube defects and Down syndrome based on the quadruple markers test.**

**d. Anomaly Scan**

**Explanation:** Anomaly scans at 18-20 weeks help in diagnosing structural abnormalities like neural tube defects and can provide additional clues for Down syndrome.

**Ques 28. A 28 year old female presents with abdominal pain and vaginal bleeding for the past 2 days.**

**b. Ruptured ectopic pregnancy**

**Explanation:** This presentation is classic for a ruptured ectopic pregnancy, which requires immediate medical attention.

**Ques 29. What is the most common type of hernia in females?**

**c. Femoral hernia**

**Explanation:** Femoral hernias are more common in females due to the wider pelvic structure, occurring below the inguinal ligament.