



Answers to Nextillo Quiz of the Month – Part-1

Q1. Anti-hypertensive drug causing dry cough?

- A. **Lisinopril**
- B. Propranolol
- C. Minoxidil
- D. Amlodipine

Ans 1. Correct answer is A. Lisinopril is an Angiotensin Converting enzyme (ACE) inhibitor. This enzyme is responsible for converting Angiotensin I into Angiotensin II. At the same time, this enzyme breakdowns bradykinin.

The function of Angiotensin II is to cause vasoconstriction, cardiac remodelling and Aldosterone secretion from Adrenal Cortex. Aldosterone is responsible for Sodium retention and Potassium excretion.

Inhibiting ACE enzyme decreases aldosterone leading potassium retention and increase in bradykinin causes dry cough.

Q2. 28 wk female presented to the emergency with sudden onset seizures. Her BP is 180/110. which drug will you use to subside seizures?

- A. Midazolam
- B. Levetiracetam
- C. **MgSO₄**
- D. Lamotrigine

Ans 2. Correct answer is C. Magnesium Sulphate acts an anti-convulsant agent in patient with Eclampsia. The mechanism involves blockade of NMDA receptors in the brain and vasodilation in the cerebral blood vessels. Vasodilation addresses cerebral ischemia. It is better than any other anti-convulsant especially for eclampsia.

Q3. Following drugs/treatments are used in the management of DKA except?

- A. Insulin
- B. Potassium
- C. **Furosemide**
- D. Dextrose

Ans 3. Correct answer is C. Patients with Diabetic Ketoacidosis have insulin deficiency, and fluid depletion. They need fluids, electrolytes, and glucose correction which requires dextrose at one point. Furosemide will worsen fluid and electrolyte balance.

Q4. Out of the mentioned leukaemias, all are strongly associated with radiation exposure except?

- A. AML
- B. ALL
- C. CML
- D. **CLL**

Ans 4. Correct answer is D. CLL is least likely associated with radiation exposure. There is hardly any link between them.

Q5. Rapid correction of hyponatremia leads to which of the following complication?

- A. Cerebral Edema
- B. **CPM**
- C. Hypoglycaemia
- D. Hypokalaemia

Ans 5. Correct answer is B. Rapid correction of Hyponatremia leads to central pontine myelinolysis. Loss of myelin of the neuron of the pons leads to locked in syndrome. There is retention of consciousness, hearing and vertical eye movement and blinking.

Q6. Which of the following anti-thyroid drugs is used in the first trimester of pregnancy?

- A. Methimazole
- B. Carbimazole
- C. Propylthiouracil**
- D. Iodine 131

Ans 6. Correct answer is C. Propylthiouracil is used in the first trimester of pregnancy to treat hyperthyroidism. Methimazole is associated with risk of Scalp defects while propylthiouracil does not have the risk.

Q7. Which of the following is not included in DASH diet?

- A. Rich in Na**
- B. Rich in K
- C. Rich in Ca
- D. Rich in Mg

Ans 7. Correct answer is A. DASH diet – Dietary Approaches to Stop Hypertension. It includes vegetables, fruits, low fat-dairy products, lean meat products, carbohydrates, and Nuts & seeds. Each food is advised in a limited quantity. This diet promotes balance and limits salt consumption.

Q8. Which of the following is implicated as the cause of office headache?

- A. Maxillary sinusitis
- B. Sphenoid Sinusitis
- C. Frontal sinusitis**
- D. Ethmoid sinusitis

Ans 8. Correct answer is C. Frontal Sinusitis can present in with pressure in the forehead without nasal symptoms.

Q9. Leukemia associated with DIC?

- A. CML
- B. APML
- C. AMLM7**
- D. ALL

Ans 9. Correct answer is C. The Leukemic blasts in APML have tissue factor present on the surface which activates the coagulation cascade.

Q10. Which of the following is NOT a cause of hypercalcemia?

- A. Tuberculosis
- B. Lymphoma
- C. Vitamin D intoxication
- D. Acute Pancreatitis**

Ans 10. Correct answer is D. Hypocalcaemia is associated with Acute pancreatitis. Pancreatic enzymes digest mesenteric fat that releases free fatty acids which combine with Calcium to form salts. It may also be due to transient hypoparathyroidism and hypomagnesemia.

Q11. Complete absence of dystrophin leads to?

- A. Becker Muscular Dystrophy**
- B. Duchene Muscular Dystrophy
- C. Myasthenia Gravis
- D. Lambert Eaton Syndrome

Ans 11. Correct answer is A. Complete absence of dystrophin gene or non-functional gene leads to Duchene Muscular Dystrophy. Partially functional gene leads to Becker Muscular Dystrophy.

Q12. All of the following can cause cherry red spot in the retina except?

- A. Tay Sach's Disease
- B. Neimann Pick Disease
- C. Central Retinal Artery Occlusion
- D. Central Retinal Vein Occlusion**

Ans 12. Correct answer is D. Central Retinal Vein occlusion leads smashed tomato appearance of retina.

Q13. All of the following will cause upper motor neuron lesions except?

- A. Stroke
- B. GBS**
- C. Pernicious Anemia
- D. Multiple sclerosis

Ans13. Correct answer is B. Guillain barre Syndrome involves demyelination of lower motor neurons responsible for motor weakness.

Q14. 28 y/o female presents to OPD with USG report suggesting short cervix. It is defined as?

- A. Length <2.5cm**
- B. Length >2.5cm
- C. Diameter <2.5cm
- D. Diameter >2.5cm

Ans14. Correct answer is A. Short cervix is defined as cervical length ≤ 2.5 cm. It leads to increased risk of pregnancy loss, preterm labor and early delivery.

Q15. Serial monitoring of β -HCG is done in?

- A. Down Syndrome
- B. Neural tube defects
- C. Twin Pregnancy
- D. Molar pregnancy**

Ans15. Correct answer is D. Molar pregnancy can turn into a Choriocarcinoma. Monitoring beta HCG helps screen patients for the carcinoma after molar pregnancy management since choriocarcinoma secretes the same hormone.

Q16. Cholesterol is synthesized from?

- A. Acetyl CoA**
- B. Malonyl CoA
- C. Oxaloacetate
- D. Phenyl-alanine

Ans 16. Correct answer is A. Cholesterol is synthesized from Acetyl CoA. The rate limiting enzyme for synthesis is HMG CoA reductase. Statins are inhibitors of this enzyme.

Q17. As per WHO, minimum recommended antenatal visits should be?

- A. 4
- B. 8**
- C. 12
- D. 16

Ans 17. Correct answer is B. As per the WHO, minimum number of Ante-natal visits is 8 in number.

Q18. Which of the following causes hypernatremia?

- A. Diabetes Mellitus
- B. HCTZ
- C. Diabetes Insipidus**
- D. Volume Overload

Ans. 18. Correct answer is C. Diabetes Insipidus is a condition where the body is unable to conserve water due to either deficiency of ADH or inadequate response to ADH. Water loss leads volume depletion. This can present as Hypernatremia.

Q19. Which of the following is associated with thrombosis?

- A. Chlamydia Urethritis
- B. Aspirin poisoning
- C. HIT type 2**
- D. Thiazide

Ans 19. Correct answer is C. HIT type 2 is due antibodies against PF4. The antibodies recognize PF4 and Heparin complex which then activates platelets causing hypercoagulable state and thrombocytopenia.

Q20. Type of inheritance seen in sickle cell anemia?

- A. AD
- B. AR**
- C. XD
- D. XR

Ans 20. Correct answer is B. Sickle cell anemia is an autosomal recessive disorder. It is characterised by sickling of RBCs in response to stress, infection, dehydration and hypoxia.

Q21. The most frequently encountered tumour of anterior mediastinum is?

- A. Thymoma**
- B. Lymphoma
- C. Neurogenic Tumours
- D. Fibroma

Ans 21. Correct answer is A. Anterior mediastinal masses include both neoplastic and non-neoplastic tumours. Thymoma is the most common anterior mediastinal tumour in the adults.

Q22. Which of the following viruses is not associated with Hepatocellular CA?

- A. Hep A**
- B. Hep B
- C. Hep C
- D. None of the above

Ans 22. Correct answer is A. Hepatitis A virus is responsible for Acute viral hepatitis. It does not cause chronic hepatitis like Hep B and C. The risk for Hepatocellular CA does not exist for Hepatitis A virus. It can cause fulminant hepatic failure.

Q23. Patients' chronic granulomatous disease present with recurrent infections with bacteria which are?

- A. Catalase +ve**
- B. Catalase -ve
- C. Reverse CAMP +ve
- D. ZN stain +ve

Ans 23. Correct answer is A. Patients with chronic granulomatous disease have deficiency for NADPH oxidase. This enzyme is responsible for generation of Superoxide and regulation ionic content in phagosomes. Deficiency leads to increased risk for Catalase positive organisms.

Q24. Galactosemia is caused due to deficiency of?

- A. Galactokinase
- B. UDP galactose 4 epimerase
- C. Galactose 1 phosphate uridyl transferase**
- D. Aldose reductase

Ans 24. Correct answer is C. Neonates with classic galactosemia is usually due to Galactose uridylyl-transferase deficiency. This can lead to neonatal death if lactose free diet is not given.

Q25. Condyloma acuminata is most commonly caused by?

- A. HPV 31,33
- B. HPV 6,11**
- C. HPV 16,18
- D. HPV 11, 16

Ans 25. Correct answer is B. Condyloma acuminata is anogenital warts most commonly causes by Human papilloma virus 6, and 11. It is spread primarily through sexual contact.

Q26. ART guidelines for pregnant females?

- A. Start after 1st trimester and continue lifelong
- B. Start immediately irrespective of trimester**
- C. Start immediately and continue 6 weeks after birth
- D. Start after 1st trimester and continue 6 weeks after birth

Ans 26. Correct answer is B. All pregnant women who are HIV positive require lifelong anti-retroviral therapy irrespective of CD4 count and WHO clinical staging.

Q27. Wrong about CPR is?

- A. Compression rate is 120/min
- B. Compression ventilation ratio is 30:2
- C. AED is not advised in arrhythmia**
- D. CPR is advised in case of Cardiac arrest

Ans 27. Correct answer is C. In cardiopulmonary resuscitation, AED is advised if the rhythm is shockable. Shockable rhythms include Ventricular tachycardia and Ventricular fibrillation. In case of basic life support, AED is the only instrument which can detect the rhythm.

Q28. Which of the following is the indication to use sodium bicarbonate in DKA?

- A. pH<7.5
- B. pH<7.2
- C. pH<7.1
- D. pH<6.9**

Ans 28. Correct answer is D. The only indication to use Sodium bicarbonate in Diabetic ketoacidosis is pH < 6.9.

Q29. Drug of choice for Cryptococcal meningitis?

- A. Miconazole + Fluconazole
- B. Amphotericin B + Fluconazole
- C. Amphotericin B + Flucytosine**
- D. Amphotericin B + Clotrimazole

Ans 29. Correct answer is C. Drug of choice for Cryptococcal meningitis is Amphotericin B with flucytosine for 2 weeks. This is followed by fluconazole as consolidation therapy for 8 weeks. Fluconazole is then prescribed for 1 or more year as maintenance therapy