



# ANSWERS TO NEXTILLO QUIZ OF THE MONTH: JULY 2024

**Q1. Patients with acute gouty arthritis can be given which of the following drugs?**

- A. Colchicine
- B. Ibuprofen
- C. Both A and B
- D. Febuxostat

**Ans 1. Correct answer: C**

Explanation: Both Colchicine and Ibuprofen can be used for the management of acute gouty arthritis. Febuxostat monotherapy is contraindicated in acute gout as it can alter serum uric acid levels and precipitate an attack. Corticosteroids are used if both NSAIDs and colchicine are contraindicated.

**Q2. Which of the following is not used for migraine prophylaxis?**

- A. Naproxen
- B. Propranolol
- C. Verapamil
- D. Topiramate

**Ans 2. Correct answer: A**

Explanation: NSAIDs like Naproxen are used for the acute treatment of migraine attacks, not for prophylaxis. Prophylactic medications include beta-blockers like Propranolol, calcium channel blockers like Verapamil, and anticonvulsants like Topiramate.

**Q3. Regimen for pre-exposure prophylaxis (PrEP) for HIV?**

- A. Tenofovir + Didanosine
- B. Lamivudine
- C. Tenofovir + Emtricitabine
- D. Tenofovir + Abacavir

**Ans 3. Correct answer: C**

Explanation: PrEP is a medication regimen used to prevent HIV transmission in high-risk individuals, including those with multiple sexual partners, an HIV-positive partner, recent sexually transmitted infections, inconsistent condom use, injection drug use, and sex for money.

**Q4. Regimen for post-exposure prophylaxis (PEP) in HIV includes?**

- A. Tenofovir + Lamivudine + Efavirenz
- B. Lamivudine + Efavirenz
- C. Ritonavir + Lamivudine
- D. Ritonavir + Ribavirin + Abacavir

**Ans 4. Correct answer: A**

Explanation: Post-exposure prophylaxis (PEP) should ideally be started within 72 hours of exposure to HIV and continued for 28 days. The recommended regimen includes Tenofovir, Lamivudine, and Efavirenz.

**Q5. Which of the following is not a DNA virus?**

- A. HBV
- B. HCV
- C. CMV
- D. Herpes

**Ans 5. Correct answer: B**

Explanation: Hepatitis C virus (HCV) is an RNA virus, while Hepatitis B virus (HBV), Cytomegalovirus (CMV), and Herpes simplex virus (HSV) are DNA viruses.

**Q6. Which of the following is not spread by the fecal-oral route?**

- A. HAV
- B. HBV
- C. HEV
- D. Poliovirus

**Ans 6. Correct answer: B**

Explanation: Hepatitis B virus (HBV) is spread through blood products, sexual contact, and perinatal transmission. HAV, HEV, and Poliovirus are transmitted via the fecal-oral route.

**Q7. Which of the following antigens is not present in Hepatitis B infection?**

- A. HBsAg
- B. HBeAg
- C. HBcAg
- D. HBV DNA

**Ans 7. Correct answer: C**

Explanation: HBsAg, HBeAg, and HBV DNA can be detected in the bloodstream during Hepatitis B infection. HBcAg is part of the core antigen of the Hepatitis B virus and is not circulated in the bloodstream.

**Q8. Which of the following is not part of the Herpes family?**

- A. CMV
- B. EBV
- C. HSV
- D. HBV

**Ans 8. Correct answer: D**

Explanation: CMV (Cytomegalovirus), EBV (Epstein-Barr Virus), and HSV (Herpes Simplex Virus) are part of the Herpesviridae family. HBV (Hepatitis B Virus) belongs to the Hepadnaviridae family.

**Q9. Which of the following infections occurs exclusively in immunocompromised individuals?**

- A. Localized Varicella
- B. Disseminated Varicella
- C. Oral Thrush
- D. Tinea Pedis

**Ans 9. Correct answer: B**

Explanation: Disseminated Varicella is a severe form of varicella infection that typically occurs in immunocompromised patients and is associated with high mortality. Localized Varicella (chickenpox), Oral Thrush, and Tinea Pedis can occur in both immunocompromised and immunocompetent individuals.

**Q10. Drug of choice for *C. difficile* colitis?**

- A. Fidaxomicin
- B. Azithromycin
- C. Metronidazole
- D. I/V Vancomycin

**Ans 10. Correct answer: A**

Explanation: Fidaxomicin is recommended for initial and recurrent *C. difficile* infections. Oral Vancomycin is an alternative, while Metronidazole is used for severe infections. I/V Vancomycin is not effective for this condition as it doesn't achieve sufficient concentration in the gut.

**Q11. Which of the following antiplatelet drugs is most likely associated with agranulocytosis?**

- A. Clopidogrel
- B. Aspirin
- C. Ticlopidine
- D. Ticagrelor

**Ans 11. Correct answer: C**

Explanation: Ticlopidine, a P2Y<sub>12</sub> inhibitor, has a higher risk of causing leukopenia and agranulocytosis compared to other antiplatelet drugs listed.

**Q12. Patients with febrile neutropenia should be treated with?**

- A. Amoxicillin + Clavulanate
- B. Fluconazole
- C. Imipenem
- D. Metronidazole

**Ans 12. Correct answer: C**

Explanation: Patients with febrile neutropenia should receive broad-spectrum antibiotics that cover *Pseudomonas*, such as Imipenem. They are hospitalized and isolated due to the high risk of severe infections.

**Q13. Patients with acute rheumatic fever and carditis with residual heart disease should receive penicillin prophylaxis for?**

- A. 21 years after the last episode
- B. Until age 21
- C. > 10 years after the last episode
- D. Until age 10

**Ans 13. Correct answer: B**

Explanation: Patients with acute rheumatic fever, carditis, and residual heart disease should receive penicillin prophylaxis until age 21 or for 10 years after the last episode, whichever is longer.

**Q14. Drug of choice for Chlamydia STI in pregnant women?**

- A. Macrolides
- B. Tetracyclines
- C. Aminoglycosides
- D. Fluoroquinolones

**Ans 14. Correct answer: A**

Explanation: Macrolides, such as Azithromycin, are the drugs of choice for treating Chlamydia infections in pregnant women. Tetracyclines and aminoglycosides are contraindicated due to potential adverse effects on the fetus.

**Q15. Which of the following is not responsible for peptic ulcer disease?**

- A. *H. pylori*
- B. Prostaglandins
- C. Diclofenac
- D. Fried food

**Ans 15. Correct answer: B**

Explanation: Prostaglandins are protective towards the gastric mucosa. A decrease in prostaglandin secretion can lead to peptic ulcer disease. *H. pylori* infection, NSAIDs (such as Diclofenac), and fried foods can increase the risk of peptic ulcers.

**Q16. Goodpasture syndrome is due to antibodies against?**

- A. Type I Collagen
- B. Type II Collagen
- C. Type III Collagen
- D. Type IV Collagen

**Ans 16. Correct answer: D**

Explanation: Goodpasture syndrome involves antibodies directed against the type IV collagen present in the basement membrane of the kidneys and lungs, leading to pulmonary and renal manifestations.

**Q17. MEN 2 syndrome includes all of the following except?**

- A. Medullary thyroid carcinoma
- B. Pheochromocytoma
- C. Mucosal neuroma
- D. Pancreatic adenoma

**Ans 17. Correct answer: D**

Explanation: Multiple endocrine neoplasia type 2 (MEN 2) includes medullary thyroid carcinoma, parathyroid hyperplasia, pheochromocytoma, and mucosal neuromas. Pancreatic adenomas are more commonly associated with MEN 1.

**Q18. All of the following are included in seronegative arthropathies except?**

- A. Reactive Arthritis
- B. Rheumatoid Arthritis
- C. Psoriatic Arthritis
- D. IBD-associated Arthritis

**Ans 18. Correct answer: B**

Explanation: Rheumatoid arthritis (RA) is characterized by the presence of anti-cyclic citrullinated peptide antibodies and is not classified as a seronegative arthropathy. Seronegative arthropathies include ankylosing spondylitis, reactive arthritis, psoriatic arthritis, and arthritis associated with inflammatory bowel disease (IBD).

**Q19. Which of the following is not part of Virchow's Triad?**

- A. Prothrombotic State
- B. Endothelial Injury
- C. Hypercalcemia
- D. Abnormal Blood Flow

**Ans 19. Correct answer: C**

Explanation: Virchow's Triad consists of three factors that contribute to thrombosis: endothelial injury, abnormal blood flow, and a prothrombotic state. Hypercalcemia is not part of this triad.

**Q20. Source of aldosterone in the body?**

- A. Adrenal Medulla
- B. Adrenal Cortex
- C. Liver
- D. Kidney

**Ans 20. Correct answer: B**

Explanation: Aldosterone is produced in the zona glomerulosa of the adrenal cortex. The liver produces angiotensinogen, and the kidney secretes renin.

**Q21. Effect of vasopressin in the body?**

- A. Water excretion
- B. Sodium excretion
- C. Vasoconstriction
- D. Increased Heart Rate

**Ans 21. Correct answer: C**

Explanation: Vasopressin, or antidiuretic hormone (ADH), is secreted by the posterior pituitary gland and primarily promotes water retention and vasoconstriction, thereby increasing blood pressure.

**Q22. Which antibody is secreted in response to a first-time infection?**

- A. IgG
- B. IgM
- C. IgE
- D. IgA

**Ans 22. Correct answer: B**

Explanation: IgM is the first antibody to respond to an initial infection. IgG antibodies develop later and provide longer-term immunity. IgA is found on mucosal surfaces, and IgE is involved in allergic reactions.

**Q23. Which of the following hormones has intracellular receptors?**

- A. TSH
- B. Prolactin
- C. Vitamin D
- D. Insulin

**Ans 23. Correct answer: C**

Explanation: Vitamin D acts on intracellular receptors, as do most steroid hormones. They typically alter gene expression within the cell. In contrast, hormones with membrane-bound receptors, such as TSH, prolactin, and insulin, act through second messengers.

**Q24. Which receptors cause muscle contraction in response to acetylcholine?**

- A. Nn
- B. Nm
- C. Muscarinic
- D. Alpha

**Ans 24. Correct answer: B**

Explanation: Nm receptors are nicotinic receptors located at the neuromuscular junction. When acetylcholine binds to these receptors, it triggers muscle contraction.

**Q25. Which antibody is used to diagnose rheumatoid arthritis?**

- A. Rheumatoid factor
- B. Anti-CCP
- C. Anti-Smith
- D. Anti-dsDNA

**Ans 25. Correct answer: B**

Explanation: Anti-cyclic citrullinated peptide (anti-CCP) antibodies are highly specific for rheumatoid arthritis (RA). Rheumatoid factor can also be present in RA but is less specific. Anti-Smith and anti-dsDNA antibodies are associated with systemic lupus erythematosus (SLE).

**Q26. Which antibody is used to monitor systemic lupus erythematosus (SLE)?**

- A. Rheumatoid factor
- B. Anti-CCP
- C. Anti-Smith
- D. Anti-dsDNA

**Ans 26. Correct answer: D**

Explanation: High titres of anti-dsDNA antibodies are associated with increased disease activity in SLE and are used for monitoring. Anti-Smith antibodies can help in diagnosis but are less useful for monitoring.

**Q27. Which antibody is present in CREST syndrome?**

- A. Rheumatoid factor
- B. Anti-centromere Ab
- C. Anti-SCL70
- D. Anti-dsDNA

**Ans 27. Correct answer: B**

Explanation: Anti-centromere antibodies are associated with CREST syndrome, a subset of limited systemic sclerosis. Anti-SCL70 antibodies are associated with diffuse systemic sclerosis.

**Q28. Pheochromocytoma involves?**

- A. Pancreas
- B. Pituitary
- C. Adrenal Cortex
- D. Adrenal Medulla

**Ans 28. Correct answer: D**

Explanation: Pheochromocytoma is a tumor of the chromaffin cells in the adrenal medulla. It can also occur in association with genetic conditions like von Hippel-Lindau disease, MEN 2 syndromes, and neurofibromatosis type 1.

