Medicine MCQs Block Q 2024

1. A 35-year-old female presents with a headache that she describes as a dull, tight sensation, with a feeling of pressure around her head, resembling a band. She mentions the pain often radiates from the occipital region to the forehead and progressively worsens throughout the day. There is no associated photophobia or vomiting, and the headache is not disabling. On examination, there is mild tenderness over the skull vault, but no features suggestive of trigeminal neuralgia or temporal arteritis. Which of the following is the most likely diagnosis?

A. Cluster headache
B. Medication overuse headache
C. Migraine without aura
D. Temporal arteritis
E. Tension-type headache

2. A 28-year-old woman presents with frequent migraine attacks, occurring more than twice a month, despite avoiding known triggers. She reports severe nausea during attacks and describes little relief from over-the-counter analgesics. She has been taking triptans with partial benefit but is concerned about her increasing usage. She is also planning to conceive in the near future. Which of the following is the most appropriate prophylactic option for her?

A. Amitriptyline
B. Ergotamine
C. Lisinopril
D. Monoclonal antibodies to CGRP receptor
E. Topiramate

3. A 32-year-old woman, presents to the neurology clinic with a six-month history of gradually worsening vision in her right eye. She initially thought it was just age-related decline, but when she noticed that her left eye also started experiencing similar problems, she sought medical attention. Her symptoms began with blurring of central vision and difficulty reading, followed by episodes of double vision. Her neurologist referred her to a specialist after conducting an initial evaluation. She mentions having had several minor head injuries as a child but no significant other medical conditions or family history. She has tried over-the-counter eye drops without any improvement. She is now concerned about the possibility of multiple sclerosis (MS) and wants your opinion on what might be causing her symptoms.

A. Aggressive MS
B. Clinically Isolated Syndrome (CIS)
C. Multiple Sclerosis with Optic Neuritis
D. Primary Progressive MS
E. Neuromyelitis optica spectrum disorder (NMOSD)

4. A 40-year-old man presents with episodes of sudden visual disturbances, including seeing flashing lights and colourful blobs, followed by tonic-clonic seizures. He recalls a head injury from a car accident several years ago. Neurological examination reveals no focal deficits, but MRI shows a cortical lesion in the occipital lobe. Based on the clinical and imaging findings, which of the following best describes the most likely classification of his seizures?

A. Focal seizures with secondary generalisation
B. Generalised tonic-clonic seizures
C. Reflex epilepsy
D. Temporal lobe epilepsy
E. Unknown onset seizures

5. A 45-year-old man presents to the emergency department with a sudden onset of severe headache described as “the worst headache of his life,” accompanied by nausea and vomiting. He has no significant medical history or family history of bleeding disorders. On examination, he is conscious but appears restless, with a blood pressure of 180/100 mmHg and a pulse rate of 110 beats per minute. Given the clinical presentation, which of the following investigations would be the most definitive in confirming the diagnosis of subarachnoid hemorrhage (SAH) in this patient?

A. Computed Tomography Angiogram (CTA)
B. Cranial Magnetic Resonance Imaging (MRI)
C. Lumbar Puncture with Cytological Examination
D. Non-contrast Computed Tomography (CT) of the Head
E. Transcranial Doppler Ultrasonography (TCDU)

6. A 34-year-old man is brought to the emergency department with a 3-day history of fever, headache, confusion, and seizures. On examination, he is febrile (38.5°C) and disoriented to time and place. Neurological examination reveals no focal deficits. Lumbar puncture shows an opening pressure of 200 mmH_2O, elevated white cell count with lymphocytic predominance, normal glucose, and mildly elevated protein. MRI of the brain reveals hyper-intense lesions in the temporal lobes. What is the most likely diagnosis, and which investigation would confirm it?
A. Autoimmune encephalitis – Serum anti-NMDA receptor antibodies
B. Bacterial meningitis – CSF Gram stain and culture
C. Herpes simplex virus encephalitis – CSF polymerase chain reaction (PCR) for HSV
D. Neurosyphilis – Serum rapid plasma reagin (RPR) and CSF-VDRL
E. Tuberculous meningitis – CSF acid-fast bacilli (AFB) staining and culture

7. A 68-year-old man is brought to the casualty department by his family due to progressive confusion, memory loss, and personality changes over the past two months. The family reports that he has had difficulty performing daily tasks and has developed episodes of agitation and irritability. He has a history of uncontrolled hypertension and diabetes mellitus. On examination, the patient is disoriented and has a Mini-Mental State Examination (MMSE) score of 16/30. Neurological examination reveals mild motor weakness on the left side. CT scan of the brain shows multiple areas of ischaemic damage in both the cortical and subcortical regions. What is the most likely diagnosis in this patient?
A. Chronic subdural hepatoma
B. Normal-pressure hydrocephalus
C. Vascular dementia
D. Vitamin B12 deficiency
E. Wernicke's encephalopathy

8. A 65-year-old man with a 10-year history of idiopathic Parkinson's disease (PD) presents with progressive worsening of motor symptoms, including increased dyskinesias, prolonged "off" periods, and frequent freezing episodes leading to occasional falls. He has been on a regimen of levodopa/carbidopa (Sinemet) three times daily, which initially provided good symptom control. Over the past six months, his Unified Parkinson's Disease Rating Scale (UPDRS) score has steadily increased despite medication adjustments. Neurological examination reveals significant bradykinesia, rigidity, and tremors, along with postural instability. Cognitive function is preserved, and there are no signs of severe depression or psychosis. Which of the following therapeutic options would be most appropriate to improve his symptoms?
A. Deep Brain Stimulation (DBS)
B. Dopaminergic Agonist Therapy
C. Intensive Physical and Occupational Therapy Program
D. L-DOPA Sustained-Release Formulation
E. Monoamine Oxidase B Inhibitor (MAO-BI)

9. A 50-year-old woman presents to the emergency department with a sudden onset of a severe headache described as "the worst headache of her life." Her family reports that she briefly lost consciousness before arrival. She now complains of nausea, vomiting, and photophobia. On examination, she is drowsy but responsive to verbal commands. Her vital signs include a blood pressure of 160/95 mmHg, pulse rate of 90 beats per minute, and a temperature of 37.6°C. Neurological examination reveals neck stiffness, but no focal deficits. What is the most appropriate initial investigation to confirm the suspected diagnosis?
A. Cerebral Angiography
B. Computed Tomography (CT) of the Head without Contrast
C. Electroencephalogram (EEG)

D. Lumbar Puncture
E. Magnetic Resonance Imaging (MRI) of the Brain

10. A 35-year-old woman presents to the clinic with a 1-week history of severe, constant headaches that worsen when she is upright and improve when lying down. She also reports nausea, vomiting, photophobia, and generalised fatigue. On further QUESTIONing, she denies any history of recent head trauma or known chronic illnesses. Her vital signs are stable, with a blood pressure of 120/80 mmHg, pulse of 82 beats per minute, and a temperature of 37.6°C. Neurological examination reveals no focal deficits, but fundoscopy shows bilateral papilledema. Which of the following additional findings would be the most concerning red flag sign warranting urgent investigation for a potentially life-threatening condition?
A. Fever with nuchal rigidity
B. Fluctuating level of consciousness
C. History of recurrent headaches during the past year
D. Presence of a visual field defect
E. Sudden onset of severe headache described as the "worst headache of her life"

11. A 65-year-old male presents to the Emergency Department with hematemesis and melena. He is hemodynamically unstable, with a blood pressure of 90/60 mmHg and a heart rate of 110 bpm. He is immediately resuscitated with intravenous fluids and transfused with packed red blood cells. Upper GI endoscopy reveals a high-risk bleeding duodenal ulcer with an adherent clot, requiring endoscopic haemostasis. What is the most appropriate next step in managing this patient's condition, particularly focusing on acid suppression therapy?
A. Start an oral high-dose proton pump inhibitor (PPI) immediately.
B. Administer an intravenous PPI bolus of 40 mg and continue with 4 mg/hour infusion for 72 hours.
C. Administer an intravenous PPI bolus of 80 mg followed by 8 mg/hour infusion for 72 hours.
D. PPI IV twice a day therapy until further endoscopic assessment.
E. Use intermittent oral PPI therapy instead of continuous infusion.

12. A 60-year-old man with a history of decompensated cirrhosis presents with progressive confusion, altered sleep patterns, and flapping tremors (asterixis). His family mentions that he has been eating poorly and has been constipated for several days. Laboratory tests reveal elevated serum ammonia levels, but other metabolic parameters are within normal limits. He is diagnosed with hepatic encephalopathy, and appropriate management is initiated. During treatment, the patient's condition deteriorates, requiring additional intervention. Which of the following statements most accurately reflects the evidence-based management of this condition?
A. Dietary protein restriction should be implemented to reduce ammonia production.
B. Lactulose should be titrated to achieve 2-3 soft stools per day and lower colonic pH.
C. Phosphate enemas are preferred over oral lactulose in all cases of hepatic encephalopathy.
D. LOLA (L-ornithine L-aspartate) has limited evidence for efficacy and is not routinely recommended.
E. Rifaximin is reserved only for patients with severe constipation and refractory encephalopathy.

13. A 30-year-old homeless man is brought to the emergency department by ambulance after being found unconscious in an alley during a cold winter night. On arrival, his core body temperature is measured at 32°C. He is lethargic but responds to painful stimuli. He is bradycardic, with a heart rate of 42 bpm, and has shallow breathing with an oxygen saturation of 88% on room air. As the casualty medical officer, you are tasked with initiating the primary management for this patient. Which of the following is the most appropriate initial management step in this situation?
A. Administer warmed intravenous fluids to actively rewarm the patient
B. Begin forced-air rewarming and cover the patient with an insulating blanket
C. Perform bladder lavage with 300mL of warmed saline to raise core temperature
D. Provide oxygenation, replace wet clothing, and insulate the patient from further heat loss
E. Refer immediately to a tertiary care center for ECMO or cardiopulmonary bypass

14. A 32-year-old male presents to the emergency department after trekking to a high-altitude region (>3000m) 48 hours ago. He complains of severe headache, nausea, and dizziness, accompanied by fatigue and insomnia. He denies any chest pain or shortness of breath. On examination, he is conscious, with no focal neurological deficits. His vital signs include a heart rate of 90 bpm, respiratory rate of 20/min, oxygen saturation of 90% on room air, and blood pressure of 110/70 mmHg. As a house officer in the emergency department, which of the following is the most appropriate next step in the management of this patient?
A. Administer 8 mg of dexamethasone and advise immediate descent to a lower altitude
B. Initiate high-flow oxygen therapy and advise rest at the current altitude
C. Prescribe acetazolamide 250 mg three times daily and provide simple analgesics for symptom control
D. Refer to a tertiary care facility for urgent neuroimaging to rule out intracranial pathology
E. Start intravenous diuretics to manage fluid retention and intracranial pressure
Correct Answer: C. Prescribe acetazolamide 250 mg three times daily and provide simple analgesics for symptom control

15. A 45-year-old female presents with fatigue and intermittent right upper quadrant discomfort. She denies alcohol use and reports no recent drug intake or herbal remedies. Her past medical history is significant for diabetes and hypertension. On examination, she has a BMI of 32. Laboratory investigations show the following: ALT: 56 U/L (normal: 7–56 U/L), AST: 78 U/L (normal: 10–40 U/L), Alkaline phosphatase (ALP): 90 U/L (normal: 44–147 U/L), Which of the following is the most likely diagnosis in this patient?
A. Alpha-1-antitrypsin deficiency
B. Non-alcoholic fatty liver disease (NAFLD)
C. Chronic hepatitis B
D. Drug-induced liver disease
E. Autoimmune hepatitis

Correct Answer: B. Non-alcoholic fatty liver disease (NAFLD)

16. A 54-year-old male presents to the clinic with complaints of fatigue and easy bruising over the past few months. He has a history of chronic alcohol use but denies any recent alcohol intake. On examination, he exhibits jaundice, ascites, and spider angiomas. The spleen is palpable 5 cm below the left costal margin. Laboratory investigations reveal: Hemoglobin: 11.8 g/dL (normal: 13.5–17.5 g/dL), White blood cell count: 3,800 /µL (normal: 4,500–11,000 /µL), Platelet count: 55,000 /µL (normal: 150,000–400,000 /µL), Mean corpuscular volume (MCV): 105 fL (normal: 80–100 fL), AST: 120 U/L (normal: 10–40 U/L), ALT: 50 U/L (normal: 7–56 U/L), Alkaline phosphatase (ALP): 110 U/L (normal: 44–147 U/L), Prothrombin time (PT): Prolonged. As a final-year medical student, you are asked to explain why the patient's platelet count is more significantly reduced compared to his haemoglobin and white blood cell count. Which of the following mechanisms best explains the pronounced thrombocytopenia in this patient?
A. Accelerated destruction of platelets due to autoimmune processes
B. Bone marrow suppression from chronic alcohol toxicity
C. Decreased thrombopoietin production by the diseased liver
D. Sequestration of platelets in an enlarged spleen.
E. Thrombotic microangiopathy causing platelet consumption

Correct Answer: C. Decreased thrombopoietin production by the diseased liver

17. A 45-year-old male patient with a history of chronic hepatitis C presents for evaluation of liver fibrosis. Laboratory results show normal liver function tests but elevated AST and ALT levels. You are considering non-invasive markers to assess his hepatic fibrosis. Which of the following non-invasive tests is the most appropriate for accurate and immediate assessment in this scenario?
A. Enhanced Liver Fibrosis (ELF assay
B. FIB-4 score
C. Fibrotest
D. Transient elastography (Fibroscan)

E. Ultrasound Hepatobillary system

Correct Answer: D) Transient elastography (Fibroscan)

18. A 48-year-old female presents for routine health screening, during which her liver function tests (LFTs) reveal mild abnormalities, including elevated ALT and AST levels with normal bilirubin. She denies any symptoms and has no stigmata of chronic liver disease on examination. Her BMI is 32, and her medical history includes type 2 diabetes mellitus and hypertension. She reports occasional alcohol use and no history of drug use or tattoos. Which of the following steps is most appropriate to further evaluate the cause of her abnormal LFTs?

A. Assess for autoimmune markers such as antinuclear antibody (ANA) and anti-smooth muscle antibody (ASMA).
B. Initiate transient elastography (Fibroscan) to assess liver stiffness.
C. Order hepatitis B surface antigen (HBsAg) and hepatitis C antibody (anti-HCV).
D. Perform liver biopsy to evaluate for non-alcoholic fatty liver disease (NAFLD).
E. Review her metabolic syndrome risk factors and perform an abdominal ultrasound.

Correct Answer: E) Review her metabolic syndrome risk factors and perform an abdominal ultrasound.

19. A 38-year-old male presents to the emergency department with a two-day history of fatigue, nausea, and right upper quadrant abdominal discomfort. On examination, he has mild jaundice and tenderness over the liver. His laboratory results show: ALT: 450 U/L, AST: 520 U/L, Bilirubin: Normal, INR: Normal,
He denies alcohol use and reports no recent travel or history of viral hepatitis. He also mentions that he recently started taking an over-the-counter medication for headaches. Which of the following is the most likely diagnosis?
A) Acute viral hepatitis
B) Autoimmune hepatitis
C) Ischaemic hepatitis
D) Paracetamol-induced hepatotoxicity
E) Toxin exposure
Correct Answer: D) Paracetamol-induced hepatotoxicity

20. A 32-year-old male presents to the emergency department two hours after being bitten by a snake. He complains of local pain, swelling at the bite site, and mild oozing from the wound. On examination, there is significant edema and tenderness around the bite site, but no signs of neurotoxicity such as ptosis or respiratory distress. Laboratory results show prolonged prothrombin time (PT) and low fibrinogen levels. Antivenom is prepared for administration. Which of the following is most accurate regarding the management of this patient?
A) Administer antivenom subcutaneously to minimize the risk of anaphylaxis.
B) Antivenom will completely reverse all coagulation abnormalities within 1–3 hours.
C) Coagulopathy may persist for hours even after venom neutralization by antivenom.
D) Repeat antivenom administration is required if fibrinogen levels remain low after 3 hours.
E) Thrombocytopenia caused by venom will resolve immediately after antivenom administration.

21. A 23-year-old male is found unconscious on the street. He was reportedly seen taking an unidentified illicit substance. Further history is unavailable. On examination, his Glasgow Coma Scale (GCS) is 9, pupils are constricted and equal, heart rate is 110/min, blood pressure is 116/84 mmHg, and temperature is 36.8°C. Arterial blood gases reveal a mild respiratory acidosis. General physical examination reveals no focal neurological deficits, but fresh needle marks are found on his arms. Which of the following is the most likely substance causing this presentation?
A) Amphetamines
B) Diacetylmorphine (Diamorphine)
C) Methamphetamine
D) MDMA (Ecstasy)

E) Synthetic cannabinoids

22. A 35-year-old man is brought to the emergency department after intentionally inhaling solvent fumes in a suicide attempt. He is confused, tachypneic, and dyspneic. His vital signs include a heart rate of 120 bpm, blood pressure of 130/90 mmHg, respiratory rate of 30/min, and oxygen saturation of 88% on room air. Arterial blood gas reveals pH 7.30, $PaCO_2$ 30 mmHg, PaO_2 55 mmHg, and bicarbonate 16 mmol/L.
What is the most appropriate initial management for this patient?
A) Administration of activated charcoal
B) High-flow oxygen via non-rebreather mask
C) Endotracheal intubation and mechanical ventilation
D) Cardiac monitoring only
E) Supportive care until symptoms resolve

Reason: The patient has significant hypoxemia due to inhalation of toxic fumes. High-flow oxygen is the priority to improve oxygenation. Mechanical ventilation is considered only if the patient deteriorates or does not respond to non-invasive measures.

23. A 28-year-old woman presents to the emergency department six hours after ingesting an unknown quantity of acetaminophen-containing tablets in a suicide attempt. She complains of nausea, vomiting, and abdominal discomfort. Her vital signs include a heart rate of 110 bpm, blood pressure of 100/80 mmHg, respiratory rate of 20/min, and oxygen saturation of 96% on room air. Serum acetaminophen levels are not yet available. What is the most appropriate next step in management?
A) Activated charcoal administration
B) Begin intravenous N-acetyecysteine (NAC) immediately
C) Gastric lavage with a nasogastric tube
D) Wait for serum acetaminophen levels before starting treatment
E) Supportive care only

24. A 29-year-old woman with systemic lupus erythematosus (SLE) presents with worsening renal function, confirmed as lupus nephritis on biopsy. She also reports difficulty in urination and intermittent hematuria after recent treatment initiation. Her current therapy includes pulsed methylprednisolone and cyclophosphamide. She is concerned about the long-term effects of her treatment on fertility and seeks advice on alternatives. What is the most appropriate next step in her management?
A. Add belimumab to her current regimen for better control of renal involvement.
B. Discontinue cyclophosphamide and switch to mycophenolate mofetil for reduced adverse effects.
C. Recommend rituximab as it is supported by robust randomised trial evidence for lupus nephritis.
D. Reassure her that fertility preservation is unnecessary, as cyclophosphamide has minimal impact on ovarian reserve.
E. Start mesna to mitigate urotoxic effects of cyclophosphamide and ensure adequate hydration.

Correct Answer E Start mesna to mitigate urotoxic effects of cyclophosphamide and ensure adequate hydration

25. A 24-year-old woman presents with recurrent oral ulcers, photosensitivity, joint pain involving her wrists and knees, and a malar rash. Laboratory investigations reveal a positive ANA test and anti- DNA antibodies in abnormal titers. Urinalysis shows 24-hour proteinuria of 0.6 g. She also reports a history of pleuritic chest pain. Based on the criteria for systemic lupus erythematosus (SLE), which diagnostic approach would most likely confirm her diagnosis?
A. Confirm the diagnosis if ANA positivity is accompanied by seizures or psychosis.
B. Require renal biopsy to confirm the presence of glomerulonephritis before diagnosing SLE.
C. Diagnose SLE if at least four clinical or immunological criteria are met, either serially or simultaneously.
D. Rule out SLE if thrombocytopenia or haemolytic anaemia is not present.
E. Consider the presence of arthritis mandatory for SLE diagnosis.

26. A 50-year-old woman with a history of Sjogren syndrome presents with progressive lymphadenopathy. Physical examination reveals firm, enlarged lymph nodes in the cervical region. Routine blood work shows elevated ESR and hypergammaglobulinemia. Which of the following investigations is most appropriate to evaluate her condition further?
A. Corneal staining with rose bengal
B. Lymph node biopsy
C. Minor salivary gland biopsy
D. Schirmer tear test
E. Urinary concentrating ability test

27. A 32-year-old woman presents to the outpatient department with a history of three recurrent first trimester abortions. She also reports a history of intermittent swelling and pain in her lower legs. Physical examination is unremarkable, and there is no active swelling or erythema. Laboratory investigations reveal a prolonged activated partial thromboplastin time (aPTT), and further testing confirms the presence of lupus anticoagulant. Based on these findings, which of the following is the most appropriate next step in confirming her diagnosis?
A. Anticardiolipin antibody testing
B. Beta-hCG level measurement
C. Chromosomal analysis of the patient and partner
D. Endometrial biopsy
E. Hysterosalpingography

28. A 60-year-old woman presents with a 3-month history of persistent morning stiffness lasting more than 2 hours, predominantly in her shoulders, hips, and knees. She reports fatigue, unintentional weight loss, and intermittent low-grade fevers. On examination, there is no visible joint swelling or deformity, but the patient exhibits tenderness over the proximal muscle groups. Her ESR is significantly elevated, and CRP is mildly raised. Rheumatoid factor and anti-CCP antibodies are negative. Which of the following is the most appropriate next step in diagnosing the underlying condition in this patient?
A. Arthrocentesis with synovial fluid analysis to exclude crystal arthropathy
B. High-dose corticosteroid trial with monitoring of symptom improvement
C. Imaging studies (MRI or ultrasound) to assess for inflammatory bursitis or tenosynovitis
D. Laboratory testing for ANCA and muscle enzymes (e.g., CK and aldolase)
E. Temporal artery biopsy to exclude associated vasculitis

Surgery
Q1. A 60-year-old TPN-dependent male with short-gut syndrome and diarrhea presents with a nonhealing leg wound. Which trace element may he need supplementation with?
a. Manganese
b. Fluorine
c. Selenium
d. Copper
e. Zinc

Q2. A 67-year-old woman complains of paresthesias in the limbs. Examination shows loss of vibratory sense, positional sense, and sense of light touch in the lower limbs. She is found to have pernicious anemia. Which Vitamin Deficiency she will have?

a) Vitamin B6
b) Vitamin B3
c) Ascorbic Acid
d) Cobalamin
e) Thiamin

Q3. A 29-year-old woman reports severe abdominal pain along with persistent nausea and vomiting 4 days after Roux-en-Y gastric bypass. On evaluation, she is tachycardic with a blood pressure of 100/65. Examination reveals severe upper abdominal tenderness to palpation and CT scan reveals distended small bowel loops. What is the most appropriate next step in management?

a. Intravenous fluid resuscitation and prompt surgical exploration
b. Intravenous fluid resuscitation and serial abdominal examinations
c. Change analgesic and antiemetic medications in an effort to improve symptoms
d. Obtain upper gastrointestinal study with Gastrografin in an effort to further localize the area of obstruction
e. Keep the patient on conservative treatment and Do serial Abdominal X-ray supine.

Q4. A 37-year-old woman presents 10 weeks after her laparoscopic Bariatric surgery with severe heartburn usually after eating and food or liquid regurgitation for the past week. She reports non compliance with the postoperative diet and exercise regimen recommended to her. What Bariatric surgery she might underwent?

a. Gastric bypass
b. Gastric Banding
c. Sleeve Gastrectomy
d. Biliopancreatic Diversion
e. One anastomosis gastric bypass

Q5. A 55-year-old man with small bowel fistula has been receiving TPN for the previous 2 weeks through a single-lumen central venous catheter. He is scheduled for exploratory laparotomy and closure of fistula. On the morning of the day of surgery, TPN is discontinued and intra- venous infusion with balanced salt solution (Ringer's lactate) is started. An hour later, the patient is found to be anxious, sweating, and tachycardic. What is the most likely cause?

(A) Anxiety
(B) Hypoglycemia
(C) Hypovolemia
(D) Unexplained hemorrhage
(E) Hyperglycemia

Q1; A 68-year-old male presents to your emergency department after high-speed motor vehicle crash. His GCS was 13 in the field but is 15 on arrival. He exhibits no focal neurologic deficits and has no midline C-spine tenderness. Which of the following is the appropriate imaging workup?

a. Noncontrast CT head only
b. CTA of the head and neck
c. Noncontrast CT head andC-spine
d. No imaging indicated
e. Noncontrast C-spine CT

Q2; Following a sudden impact in an accident, the 30-year-old race car driver becomes unconscious and is admitted to the hospital. A CT scan head is performed, and a right side space- occupying lesion is noted. What is the most likely diagnosis?

A) Corpus callosum injury

B) Pituitary apoplexia
C) Acute subdural hematoma
D) Acute epidural hematoma
E) Chronic subdural hematoma

Q3; A 30-Year old male patient presented to a Neurosurgeon with complains of sensory disturbance, weakness of the hands, loss of pain and temperature sensation, asymmetrical abdominal reflexes and progressive kyphoscoliosis. What is the diagnosis?

a. Amyotrophic lateral sclerosis
b. Central pontine myelinolysis
c. Diabetic neuropathy
d. Syringomyelia
e. Multiple sclerosis

Q4; A 65-year-old woman presents with a several- week history of headaches and difficulties with speech. A sister who lives with her claims that her language "has recently not been making much sense" and that she is a bit confused. Her condition seems to be deteriorating. On neurologic examination, she has a moderately severe aphasia, with difficulty understanding language and following commands, and she makes frequent paraphasic errors when she speaks. There are no other motor or sensory deficits. An MRI with intravenous contrast reveals the presence of a ring-enhancing mass lesion within the substance of the left temporal lobe. The lesion is approximately 3.5 cm in greatest diameter, poorly demarcated from the surrounding brain, and surrounded by a moderate amount of cerebral edema. Findings on routine admission tests, including a chest x-ray and serum chemistry, are unremarkable. Which one of the following is highly malignant primary brain tumor.?

(A) Low-grade cerebral astrocytoma
(B) Metastasis to the brain from an occult primary cancer
(C) Glioblastoma multiform
(D) Meningioma
(E) Glomus tumor

Q1; A 65-years-old female presents with atypical chest pain; she has been ruled out for an MI(Myocardial infarction) three times in the past year and is otherwise healthy. To rule out esophageal causes she undergoes a manometry study, which shows absent useful peristaltic waves. Which of the following is the most likely diagnosis?

a. Barrett's Esophagus
b. Achalasia
c. Nutcracker esophagus
d. Esophageal spasm
e. Hiatal hernia

Q2; An inpatient consultation was placed for a 30-year-old obese woman who recently gave birth via C-section and presented to the hospital with acute abdominal pain, nausea, and vomiting. She is nontoxic at presentation with tenderness to her epigastrium and has laboratory data showing no leukocytosis, a bilirubin of 1.2mg/dL, mild elevations of amylase and lipase, and an abdominal ultrasound showing numerous small gallstones without gallbladder wall thickening, pericholecystic fluid, CBD stone, or dilation. After pain control, initiating NPO(nil per oral) status, and fluid resuscitation, what is the next best step?

a. Consultation to gastroenterology for an ERCP to evaluate the common bile duct and perform a sphincterotomy
b. Obtain an MRCP to evaluate the biliary tree
c. Schedule the patient for open cholecystectomy after resolution of biochemical evidence of jaundice and pancreatitis
d. Schedule the patient for laparoscopic cholecystectomy after resolution of abdominal pain
e. Discharge the patient after resolution of symptoms and laboratory abnormalities

Q3; A 60-year-old physically fit female with painless jaundice and a 20-lb weight loss presents for evaluation of a 2-cm hypodense mass in the head of the pancreas on CT scan. The patient was referred to you from a gastrointestinal medicine colleague, who performed an endoscopic ultrasound with biopsy and ERCP with stent. The biopsy is suspicious for malignancy. By imaging, the lesion appears to be clearly resectable without evidence of metastasis. Which of the following is the most appropriate management of this patient?
a. Repeat endoscopic ultrasound with biopsy
b. Pylorus preserving Pancreaticoduodenectomy
c. Total pancreatectomy
d. MRI pancreatogram
e. Neoadjuvant chemoradiation

Q4; A 45-year-old female presents with abdominal pain and an elevated amylase and lipase. The rest of her laboratory values are remarkable for a mildly elevated AST of 100 and elevated white blood cell count of 15,000. On hospital day 3, her pain is resolved and she is tolerating a regular diet. Which of the following should be performed prior to discharge?
a. ERCP
b. Abdominal ultrasound
c. Amylase and/or lipase
d. CT scan of abdomen
e. Serum ethanol level

Q5; A 30-year-old woman is 24 weeks pregnant and presents with a 5-hour history of abdominal pain. On examination, she has point tenderness over the right iliac fossa. Pelvic examination is normal. Her laboratory examination is remarkable for WBC 14. You suspect a diagnosis of acute appendicitis. What is the next diagnostic step?
a. Diagnostic laparoscopy
b. MRI of the abdomen and pelvis
c. US of the right iliac fossa
d. Transvaginal US to monitor the fetus
e. CT scan of the abdomen and pelvis

Q6; A 70-year-old male presents to the emergency department with abdominal pain, nausea, and bilious vomiting. He also complains of a painful bulge in his left groin that has been present for 4 hours. His past medical history is significant for hypertension, chronic obstructive pulmonary disease, and hypothyroidism. He has no past surgical history. His initial vitals in the emergency room are: Temperature 37.5°C, heart rate 100, blood pressure 165/90, respirations 14, O_2 saturation 93% on room air. On physical examination, he has grossly distended abdomen, and has mild tenderness to palpation throughout his abdomen, and a firm,nonreducible painful bulge in his left groin above the inguinal ligament. There are overlying skin changes in his groin. You start IV fluid resuscitation. The next best step in the treatment of this patient would be:
a. Attempt manual reduction in the ED with light sedation
b. Obtain a CT scan of the abdomen
c. Discharge the patient with a follow-up appointment in 1 week
d. Urgent inguinal hernia repair
e. Elective inguinal hernia repair

Q7; A 30-year-old female presents to the emergency department with complaints of abdominal pain, nausea, and bilious vomiting for 2 days. she has no significant past medical history, and her past surgical history is significant for multiple C-sections. CT scan demonstrates dilated loops of small bowel with a transition point in the right lower quadrant and is negative for free air or fluid. The most likely etiology for this patient's condition is:
a. Intussusception

b. Malignancy
c. Adhesions
d. Crohn disease
e. Gallstone ileus

Q8; On pathologic examination after right colectomy, a patient is diagnosed with a T3 tumor(stage2) with adequate lymphovascular dissection and negative tumor margin. What do you tell this patient about his or her need for adjuvant therapy?
a. The patient does not need adjuvant therapy because there is only marginal benefit in patients with stage II disease
b. Adjuvant therapy should be considered because although the patient is stage II, there was inadequate lymph node harvest
c. The patient should consider receiving adjuvant therapy because although the patient has stage II disease, they have high-risk stage IIdisease
d. The patient should consider adjuvant chemoradiation therapy for their stage II disease
e. The patient should receive adjuvant therapy because there is clearly a benefit for patients with stage III disease

Q9; To appropriately stage Colon cancer, patients need what imaging studies for initial assessment?
a.Chest CT, abdomen CT, pelvic CT with contrast
b. Chest x-ray, abdomen and pelvis MRI, PET/CT
c. Chest x-ray, abdomen and pelvis CT
d. Abdomen CT, pelvic MRI
e. Chest x-ray, abdomen CT, pelvic MRI

Q10; A 25-year-old man has recurrent, indolent fistula in ano. He also complains of weight loss, recurrent attacks of diarrhea with blood mixed in the stool, and tenesmus. Proctoscopy revealed a healthy, normal-appearing rectum. What is the most likely diagnosis?
A) Crohn's colitis
B) Ulcerative colitis
C) Amoebic colitis
D) Ischemic colitis
E) Colitis associated with acquired immunodeficiency syndrome (AIDS)

Q11; A 28-year-old active man with an athletic build is being evaluated for a 5-cm wide incisional hernia from a previous exploratory laparotomy for trauma. Which of the following repairs is preferred for this patient?
a. Open repair with intra peritoneal placement of synthetic mesh
b. Treat conservatively
c. Use of abdominal built
d. Laparoscopic repair with barrier-coated synthetic mesh
e. Take rest at home for 6 months

Q12. A 54-year-old man has anal pain and blood on the toilet tissue after defecation. Physical examination reveals a 2- ë 2-cm ulcerated lesion in the anal canal 4cm away from anal verge. Biopsy of the lesion returns as adenocarcinoma. Which of the following is the appropriate treatment?
a. Low anterior resection with diverting ileostomy
b. Abdominoperineal resection
c. Primary chemoradiation therapy
d. Wide local excision, skin grafting, permanent colostomy
e. Wide local excision and primary closure

Q13. A patient with gastric outlet obstruction and prolonged emesis has which electrolyte disturbance?

a. Hyperchloremic, hyperkalemic metabolic acidosis
b. Hyperchloremic, hypokalemic metabolic acidosis
c. Hypochloremic, hyperkalemic metabolic alkalosis
d. Hypochloremic, hypokalemic metabolic alkalosis
e. Hyponatremic, hypokalemic metabolic acidosis

Q14. A 50-Year old Male patient presented to emergency surgical department with Endoscopy report of active bleeding from duodenal ulcer. What is the preferred surgical therapy for hemodynamically unstable patients with bleeding duodenal ulcers?
a. Graham patch
b. Duodenotomy and three-point ligation of the bleeding vessel
c. Duodenotomy, three-point ligation of the bleeding vessel with highly selective vagotomy
d. Duodenotomy, three-point ligation of the bleeding vessels with truncal vagotomy, and pyloroplasty
e. Duodenal resection with reconstruction

Q15. A 70-year-old man presents with abdominal distension, altered bowel habit, loss of appetite and significant weight loss for the last 3 months. He does not complain of abdominal pain. What is the most probable cause?
(A) Diverticulosis of the colon
(B) Peptic ulcer disease
(C) Crohn's disease
(D) Ulcerative colitis
(E) Carcinoma of the left colon

Q16. A 35-year-old man presents with right upper quadrant pain, fever, jaundice, and shaking chills. Ultrasound of the abdomen demonstrates gallstones, normal gallbladder wall thickness, and common bile duct of 6.0mm in diameter. The patient is admitted to the hospital and given IV fluids and antibiotics and becomes stable.Which of the following is the most appropriate next step in this patient's management?
a. Endoscopic retrograde cholangiopancreatography (ERCP)
b. Placement of a cholecystostomy tube
c. Laparoscopic cholecystectomy
d. Open cholecystectomy
e. Emergent operation and decompression of the common bile duct with a T tube

Q17. A 38-year-old man with a history of fever associated with abdominal pain of 3-weeks duration presents now with a sudden onset of abdominal pain and copious vomiting. Plain abdominal x-rays reveal air under the right dome of diaphragm. A CT scan shows mesenteric lymphadenopathy and splenomegaly is found. What is the most likely diagnosis?
A) Enteric perforation
B) Tuberculosis enteritis
C) Crohn's disease
D) Primary peritonitis
E) Ulcerative colitis

Paeds
A 3 months old presents to OPD with failure to thrive. She was born full term and is on breast milk since birth. Her mother complains that she often takes out milk after every feed. She tried a formula feed but it didn't alleviate her issue. There is also history of associated cough, which gets severe sometimes.There is no history of fever or loose stools. Clinically she is slightly pale and weighs 3 kgs. Her abdomen is soft, non-distended and palpation is unremarkable. What is the most likely diagnosis?
A) GERD

B) Pyloric stenosis
C) Inborn error of metabolism
D) H type trachea esophageal fistula
E) Pneumonia

A 3 years old boy passed 18 loose stools in last 24hrs and vomited twice in last 4 hours. Stool is watery and does not contain any blood or mucus. There is no fever associated with it. Clinically he is irritable but is drinking fluids. What is the best management step according to IMCI?
a) Intravenous fluids
b) Oral rehydration therapy
c) Intravenous fluid initially for 4 hrs followed by oral fluids
d) Plain water
e) Iv antibiotics and iv fluids

A 4 years old child presents with recurrent abdominal pain and distention since the age of one year. There is also a history of loose stools off and on. Pain is mild and not localized. Mother also complains that he is not gaining weight adequately despite having good appetite. Weaning was started at one year of age.He has been to many GPs and received antispasmodics and antibiotics but with no improvement. Clinically he looks pale with distended abdomen and weighs 12 Kgs. What is the investigation of choice for this patient?

a) Ant tissue transglutaminase antibodies (IgA)
b) Stool routine examination for ova, cysts, trophozoites
c) Sweat chloride test
d) Stool for H. pylori Antigen
e) CBC with peripheral smear

A 5 months old presents with loose stools for 3 weeks. There was a history of fever initially for two days which settled after taking antipyretics. He is still receiving ORS. He is on formula feed. There is no associated vomiting. Stools are greenish, multiple times in a day and occurs with each feed. They are watery and does not contain any blood or mucus. Clinically he is not dehydrated, has stable vitals. He also has developed rashes in the perianal areas and on the buttocks. What is the best management step?

a) Administer metronidazole
b) Oral third generation cephalosporin
c) Iv fluids and iv third generation
d) Lactose free formula
e) Avoid wheat, rye and barley

A 4 years old presents to OPD as a follow up case of celiac disease. He is on gluten free diet and has improved remarkably since then. He has shown weight gain as well. His antibodies level has also decreased. He is also accompanied by his cousin. Screening of his cousin for celiac disease reveals raised levels of ant tissue transglutaminase antibodies(IgA) but clinically he is thriving well and there is no chronic history of loose stools as well. His small bowel biopsy reveals damaged mucosa. What should his cousin be clinically labeled as?

a) Latent celiac
b) Potential celiac
c) Silent celiac
d) Overt celiac
e) Refractory Celiac

A 2.5 months' old presents with jaundice since birth. He was born full term, SVD with immediate cry and is breast fed. He passes stool twice a day which are clay colored and urine is yellow. There is no history of loose stools, fever or vomiting. Clinically he is jaundiced with distended abdomen, and liver is palpable 4 cm below costal margin. There is no edema of the feet. What is the most likely diagnosis?

a) Congenital hypothyroidism
b) Biliary atresia
c) TORCH infections
d) Alpha 1 antitrypsin deficiency
e) Idiopathic neaonatal hepatitis

A five years old girl has been brought to OPD by her mother for frequent inattentiveness episodes in a day. The episodes started two weeks ago before which she was well. Her growth and development history is unremarkable. There is no associated fever or headache. During a typical episode she gets a blank face, and she would stop writing, with pen falling from her hand and head tilting forward but after few seconds she would be working normally. What is the most likely diagnosis?

a) Absence seizures
b) Breath holding spells
c) Space occupying lesion
d) Benign partial epilepsy with Centro temporal spike(BPEC)
e) Focal seizures with impaired awareness

A 4 years old child presents to ER with 5 days' history of fever. There is also history of rhinorrhea and mild cough. Fever was initially low grade but for 2 days it has increased in intensity. He has received antipyretics and oral antibiotics only. Since morning he had two episode of generalized tonic clonic seizure with altered consciousness. What is the most likely diagnosis?

a) Febrile fits
b) Meningitis
c) Tuberculous meningitis
d) Epilepsy
e) Pseudo seizures

A 7-month infant has been brought to OPD with the complaint of increasing head size for the past 2 months. He was born full term and was on formula feed. He had head holding at three months and showed normal mile stones till the age of 4 months. Past history also reveals an episode of hospitalization for 7 days at the age of 5 months for fever and fits. He was only vaccinated at birth and family history is unremarkable. What is the most likely diagnosis?

a) Tuberculous meningitis
b) Acquired hydrocephalus
c) Congenital hydrocephalus
d) Inborn error of metabolism
e) TORCH infection

A newborn is brought from a distant village to a tertiary care OPD. He was born full term and had immediate cry. His mother did not have any antenatal visits to an obstetrician and hence was not vaccinated. Clinically neonate is pink and having good perfusion. He is taking feed. His back examination reveals a lump in lumbosacral region and lower limbs feet are deformed. His mother previous sib also had similar condition. What is the most likely diagnosis?

a) Spina bifida occulta
b) Myelomeningocele
c) Tethered cord
d) Chiari malformation type II
e) Dandy walker syndrome

A 5 years old has been brought to ER with generalized tonic clonic fit that stopped after administering him diazepam. There is no history of fever, cough or loose stools. He had a similar episode about a week ago that lasted for 5 minutes and was not associated with fever. Past history reveals child was born full term and had normal developmental mile stones. At the age of 8 months he was hospitalized for pneumonia and has an episode of fit with fever as well. Clinical examination is unremarkable. What should be the right course of action for this patient?

a) Admit the patient and start iv broad spectrum antibiotics
b) Do MRI brain to rule out any structural abnormality
c) Start an anti-epileptic therapy
d) Council the patient that it is benign and no treatment is required
e) Refer the patient to neurologist

A 14 months old has been brought to OPD for 2 days' history of low grade fever, cough and runny nose. He has been given paracetamol only. He was born full term and breastfed since birth. Mother started giving her biscuits, custard and green tea at 11 months. Clinically child looks pale and puffy. He is irritable. Chest auscultation reveals scattered rhonchi. There is also bilateral edema feet, and he weighs 7.5 Kgs. What is the most likely diagnosis?

a) Nephrotic syndrome
b) Severe malnutrition
c) Malabsorption syndrome
d) Cystic fibrosis
e) Rickets

A 5 years old child has presented with pain in both knees and ankle joints for 2 days. There is also an accompanying rash on the body which was initially presents on both feet but now has involved legs and buttocks. She has remained afebrile. There is also some puffiness around the periorbital areas. Since last night she has developed abdominal pain which is severe. Stool for occult blood is positive. What is the most likely diagnosis?

a) Acute Rheumatic fever
b) Juvenile idiopathic arthritis
c) Systemic lupus erythematosus
d) Henoch-schonlien purpura
e) Staphylococcus scalded skin syndrome

A 5-year-old boy presents with coarse facial features, joint stiffness, and frequent upper respiratory tract infections. His parents report a slow development in speech and walking. On examination, he shows hepatosplenomegaly. What is the most likely diagnosis?

a) Type 1 Mucopolysaccharidosis (Hurler syndrome)
b) Down syndrome
c) Glycogen stoarage disease Type 1 (Von Gierke)
d) Hunter syndrome
e) Pompe disease

A 14-year-old adolescent is brought to the neurology clinic by their parents due to a gradual onset of muscle weakness in the legs and feet. The parents note that the child has always been clumsy and frequently trips or falls while walking or running. On examination, the neurologist observes bilateral foot drop, high-arched feet (pes cavus), and weakness in the lower leg muscles. There is also mild wasting of the muscles in the lower limbs. The family history reveals that the child's maternal grandfather had similar symptoms and difficulties with walking during his late adulthood.

a) Duchenne muscular dystrophy
b) Becker muscular dystrophy
c) Charcot-Marie-Tooth disease
d) Amyotrophic lateral sclerosis (ALS)
e) Spinal muscular atrophy

A 4-month-old infant is brought to the pediatric clinic by concerned parents who report that their baby is excessively sleepy, difficult to wake for feedings, and frequently vomits after meals. The infant appears small for their age, and the parents mention frequent episodes of low blood sugar despite regular feedings. Physical examination reveals hepatomegaly and mild muscle weakness. Laboratory tests show hypoglycemia, elevated liver enzymes, and hyperlipidemia. Further investigations indicate an accumulation of glycogen in the liver and kidneys. Which type of glycogen storage disease is most likely affecting this infant?

A) Glycogen storage disease type I (Von Gierke disease)
B) Glycogen storage disease type II (Pompe disease)
C) Glycogen storage disease type III (Cori disease)
D) Glycogen storage disease type IV (Andersen disease)
E) Mucopolysaccharidosis type 1

Psychiatry

1. A 3-year-old boy is brought to the clinic by his parents, who are concerned about his development. They report that he has difficulty responding to his name, does not make eye contact, and has trouble understanding simple instructions. He also exhibits repetitive behaviors, such as spinning around in circles and flapping his arms. Which of the following is the most likely diagnosis?
a. Attention Deficit Hyperactivity Disorder (ADHD)
b. Autism Spectrum Disorder (ASD)
c. Language Disorder
d. Intellectual Disability
e. Rett Syndrome

2. According to the ICD-10 classification, which of the following substances is classified as a stimulant?
a. Opioids
b. Cannabinoids
c. Alcohol
d. Cocaine
e. Morphine

3. A 25-year-old male presents with symptoms of obsessive-compulsive disorder (OCD), including intrusive thoughts of contamination and compulsions to wash his hands excessively. Which of the following medications is most likely to be effective in reducing his OCD symptoms?
a. Fluoxetine (SSRI)
b. Haloperidol (Antipsychotic)
c. Alprazolam (Benzodiazepine)
d. Bupropion (NDRI)
e. Mirtazapine (Tetracyclic antidepressant)

4. A 20-year-old male presents to the emergency department with sudden onset of involuntary muscle contractions, resulting in abnormal posturing of his neck and face. He reports that he started taking haloperidol 2 days ago for treatment of psychosis. Which of the following is the most likely diagnosis?
a. Parkinson's disease
b. Acute akathisia
c. Acute dystonia
d. Tardive dyskinesia
e. Neuroleptic malignant syndrome

5. A 30-year-old female with a history of borderline personality disorder presents to the emergency department with a 1-day history of suicidal ideation. She reports that she has been feeling overwhelmed and hopeless since a recent breakup with her boyfriend. She has a history of previous suicidal attempts and has been hospitalized twice for suicidal ideation. Which of the following factors increases her risk for completed suicide?
a. Age < 20 years
b. Female gender
c. Previous suicidal attempts
d. Lack of social support
e. Chronic medical illness

6. A 29-year-old female with obsessive-compulsive disorder (OCD) is undergoing exposure and response prevention (ERP) therapy. She has a fear of contamination and compulsively washes her hands. During a therapy session, the therapist asks her to touch a "contaminated" surface and then refrain from washing her hands. Which of the following is the primary goal of this exercise?
a. To reduce her anxiety through relaxation techniques
b. To challenge her distorted thinking patterns
c. To help her learn to tolerate uncertainty and anxiety
d. To increase her sense of control over her environment
e. To reduce her avoidance behaviors