Questions
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Question 1
The rate of survival to discharge from the hospital for patients following in-hospital cardiopulmonary resuscitation is:

A. 5%
B. 10%
C. 20%
D. 50%

Question 2
According to AHA guidelines, which of the following interventions should be initiated for patients with a return of spontaneous circulation (ROSC) after cardiac arrest who do not follow verbal commands?

A. Maintain blood glucose between 80–110mg/dL
B. Administer IV corticosteroids as ordered
C. Therapeutic hypothermia at 32°C–34°C for 12–24 hours
D. Active rewarming during first 48 hours after ROSC

Question 3
Which of the following will help identify the most common cause of cardiac arrest?

A. A 12-lead ECG
B. Peak flow evaluation
C. VQ scan
D. A chest x-ray

Question 4
A few days after cardiac bypass surgery, a patient complains of dyspnea. Examination reveals a narrowed pulse pressure, hypotension, increased central venous pressure, decreased heart sounds, and signs of decreased cardiac output. The most likely diagnosis is:

A. Pulmonary embolism
B. Pulmonary edema
C. Tension pneumothorax
D. Cardiac tamponade

Question 5
The CNS is presenting a class on pulmonary edema to the new orientees. Which of the following statements is a correct explanation of the pathophysiologic difference between cardiogenic pulmonary edema (CPE) and noncardiogenic pulmonary edema (NPE)?

A. Increased left ventricular filling pressure increases pulmonary capillary oncotic pressure in CPE
B. Alveolar-capillary membrane injury causes proteins and fluid to leak into the pulmonary vasculature in NPE
C. A ventilation/perfusion (V/Q) mismatch occurs in CPE but not in NPE
D. Lymphatic obstruction causing an accumulation of fluid is a cause of NPE, but not of CPE
Question 6
Which of the following is an etiology for cardiogenic pulmonary edema?

A. Recent lung transplantation
B. Mitral valve disorders
C. Fluid overload
D. Acute respiratory distress syndrome

Question 7
A patient 2 months post cardiac surgery complains to the rehabilitation CNS that he is “having a hard time staying focused” on tasks at hand. The best strategy by the CNS is to acknowledge that some patients have neurocognitive deficits after cardiac surgery and:

A. Explain that most neurocognitive deficits resolve within 3 months of surgery
B. Elicit details of the patient’s complaint so that strategies can be devised
C. Notify the patient’s cardiologist for a follow-up evaluation
D. Tell the patient’s family to notify the physician if they notice signs of dementia

Question 8
The CNS is precepting a novice nurse caring for a patient immediately after cardiac surgery. Which of the following is the priority of care in the immediate postoperative period?

A. Using a valid and reliable instrument to assess the patient for pain
B. Connecting the epicardial pacing wires to an external pacemaker for potential bradycardia
C. Normalizing heart rate and optimizing stroke volume for hemodynamic stability
D. Weaning the patient from mechanical ventilation using a fast-track protocol

Question 9
A new staff nurse consults the cardiac CNS regarding a patient who is status post an inferior wall MI (IWMI) 3 days ago. The nurse reports that the patient is complaining of shortness of breath and seems slightly confused. The CNS evaluates the patient and notes the following: sinus tachycardia at 102, BP 90/50 mmHg, RR 24, SaO₂ 94%, afebrile. No ST elevation is observed. A new holosystolic murmur heard at the apex is noted. The CNS’s next action is to:

A. Explain that these signs are normal a few days after an IWMI and instruct to start oxygen at 2 L/m
B. Notify the physician immediately to rule out acute mitral valve regurgitation and order an echocardiogram
C. Start the patient on a norepinephrine drip and notify the physician
D. Start the patient on a nitroglycerin drip and obtain stat ABGs

Question 10
A nurse is recovering a patient after femoral-popliteal bypass surgery on his right leg. Which of the following ankle-brachial indexes (ABI) should be reported to the surgeon?

A. 0.72
B. 0.91
C. 1.10
D. 1.32
Question 11
The CNS is precepting a new nurse caring for a patient after peripheral vascular surgery. The patient’s right brachial systolic blood pressure (SBP) is 120 mmHg, the left brachial SBP is 126 mmHg. The ankle SBPs in the operative leg are both 96 mmHg. What is the ABI?

A. 0.76  
B. 0.80  
C. 0.95  
D. 1.05

Question 12
A patient experiencing a severe headache, anxiety, and “ripping” back pain is diagnosed with hypertensive crisis and r/o aortic dissection: BP 210/136 mmHg. The CNS expects immediate treatment to include:

A. Nifedipine (Procardia) 10 mg sublingual  
B. Nitroglycerin (Nitrostat) 0.6 mg tablet sublingual  
C. Enalapril (Vasotec) 40 mg PO  
D. Labetalol (Trandate) 20 mg IV bolus over 2 minutes

Question 13
A patient diagnosed with NYHA stage III heart failure secondary to idiopathic cardiomyopathy is receiving an implantable cardio defibrillator (ICD) device. Which statement would alert the nurse that more education is needed?

A. “The ICD will protect me from sudden cardiac death, but will not cure my cardiomyopathy”  
B. “If someone is touching me when I get shocked, they will not be harmed”  
C. “I’m so glad that I won’t have to take all of those medications anymore!”  
D. “Joining a support group may help me to cope with having an ICD”

Question 14
An elderly patient with a history of diabetes mellitus, coronary artery disease, and hypertension is preparing for discharge after an acute exacerbation of heart failure. The CNS is reviewing the patient’s discharge instructions. The discharge medications include: baby aspirin, metformin (Glucophage), glyburide (Micronase), lisinopril (Zestril), furosemide (Lasix), and potassium chloride. Which of the following interventions by the CNS would help reduce the risk of readmission to the hospital?

A. Help the patient identify and plan for situations that are likely to result in an acute exacerbation  
B. Go over the purpose of the medications with the family at the bedside  
C. Have the patient sign a contract that she will adhere to the medical regimen  
D. Explain to the patient that sodium and fluid restrictions are only guidelines and it’s okay to go over the limits

Question 15
According to the most recent evidence, emergency treatment for a patient with a “warm and wet” presentation of acute decompensated heart failure should initially consist of IV furosemide (Lasix) and IV:

A. Milrinone (Primacor)  
B. Dobutamine (Dobutrex)  
C. Nitroglycerin  
D. Enalaprilat (Vasotec)
Question 16
A patient has a history of heart failure and is on captopril (Capoten), metoprolol (Lopressor), and furosemide (Lasix). The physician adds low-dose spironolactone (Aldactone) to the regimen. The CNS should be particularly concerned about which of the following lab results for this patient?

A. Serum blood glucose 140 mg/dL  
B. Serum creatinine 1.8 mg/dL  
C. BNP level 100 pg/mL  
D. Hemoglobin 12 mg/dL

Question 17
When facilitating educational sessions with a heart failure patient, the CNS should:

A. Ensure that the patient attends a group discussion with other heart failure patients  
B. Explain that diet nonadherence is the most frequent reason for hospital readmission  
C. Make clear that if the treatment plan is not followed, the patient will die  
D. Have strategies in place to ensure that patients have understood the major points of the teaching

Question 18
A young adult with Down syndrome (DS) is being discharged after surgery to close a ventricular septal defect. She lives with her parents, has a job in the library shelving books, and her mother is at her bedside. The CNS is providing the discharge teaching. Which strategy would create the most successful nurse–patient relationship?

A. Smile and speak directly to the patient  
B. Read the educational materials to the patient  
C. Validate everything the patient says with the mother  
D. Don’t repeat or review key points and instructions to avoid treating the patient like a child

Question 19
A middle-aged man is admitted with a diagnosis of acute anterior wall myocardial infarction. His son brings the patient’s signed living will from home and gives it to the admitting nurse. The nurse notices that the patient has indicated that no resuscitative measures should be initiated in the event of cardiac or respiratory arrest; the nurse puts the document in the patient’s chart. An hour after admission the patient goes into ventricular fibrillation cardiac arrest. Which of the following is the most appropriate action to take in this situation?

A. Defibrillate the patient and conduct a full code  
B. Perform cardiopulmonary resuscitation, but do not defibrillate the patient  
C. Defibrillate the patient, but do not perform cardiopulmonary resuscitation  
D. Do not defibrillate the patient or perform any lifesaving interventions

Question 20
Lifestyle interventions that would have the greatest impact on health promotion and disease prevention for women at risk of heart disease would include a heart-healthy diet and:

A. Treating hypertension, cholesterol levels, and diabetes  
B. Smoking cessation, physical activity, weight maintenance/reduction  
C. Hormone replacement therapy, antioxidant supplements, folic acid supplementation  
D. Aspirin therapy, physical activity, weight maintenance/reduction
**Question 21**
The strategy that has been shown *most effective* in reducing mortality or reduction of recurrent MI is:

A. Use of ACE inhibitors  
B. Aspirin therapy  
C. Lipid-lowering medications  
D. Smoking cessation

**Question 22**
Which of the following medications is the most effective and has the *strongest evidence* for use for lowering lipid levels?

A. Nicotinic acid (Niacin)  
B. Cholesterol absorption inhibitors (eg, ezetimibe [Zetia])  
C. HMG-CoA reductase inhibitors (statins)  
D. Fibric acid derivatives (eg, fenofibrate [Tricor])

**Question 23**
A patient presents with complaints of chest pain radiating to his jaw and left shoulder. The pain has lasted for over an hour. Other symptoms include nausea and abdominal pain. You also find RR: 20; pulse: 72; BP: 152/84; SpO\(_2\): 98 on RA. A 12-lead ECG is completed within 10 minutes of presentation according to the protocol for patients with chest pain. The ECG is presented on the next slide. Labs are drawn and oxygen is placed on the patient at 2 L/min. What is the patient’s most likely diagnosis?

A. Anterior wall MI  
B. Inferior wall MI  
C. Anterolateral wall MI  
D. Inferolateral wall MI

**Question 24**
A patient presents with chest pain and hypotension. Examination reveals jugular venous distention (JVD), an S3 along the left sternal border that increases with inspiration, and clear lungs. An ECG is ordered and an inferior wall MI (IWMI) is diagnosed. Which of the following should be done *next*?

A. Record right-sided precordial leads to rule out right ventricular infarct (RVMI)  
B. Start a nitroglycerin drip to relieve the patient’s chest pain  
C. Volume load with crystalloids and/or colloids to increase blood pressure  
D. Decrease stroke volume with fluid restriction and diuretics to decrease cardiac workload

**Question 25**
On rounds, the CNS sees a patient, 3 days after suffering an acute anterior wall MI, sitting upright, and leaning over the bedside table, rubbing his chest. When asked how he is doing, he states that his “chest is sore” and that it “hurts to breathe.” The nurse’s *priority* should be to:

A. Report the patient’s complaints to the physician, stat  
B. Activate the rapid response team  
C. Place the patient on oxygen at 2 L/min  
D. Collect more data before notifying the physician
**Question 26**
A common complication of mechanical prosthetic valves that is not found in prosthetic tissue valves is:

- A. Peripheral embolization
- B. Perivalvular leak
- C. Structural valve deterioration
- D. Hemolysis

**Question 27**
In the early phase or stage I of acute pericarditis, the ST-segments recorded on the 12-lead ECG are typically:

- A. Elevated in the limb leads only
- B. Elevated in most of the limb leads and precordial leads
- C. Depressed in the precordial leads only
- D. Depressed in most of the limb leads and precordial leads

**Question 28**
One way to *individualize* patient teaching for a patient with hypertension would be to:

- A. Provide information about the specific medications prescribed for the patient
- B. Have the patient return demonstrate how to take and record their blood pressure
- C. Describe strategies to maximize health and decrease stress
- D. Give the patient suggestions for low sodium food choices based on her food preferences

**Question 29**
A patient presents to the ED with acute dyspnea. The *most valuable* information in making the diagnosis of acute decompensated heart failure (ADHF) is a report of:

- A. Details of previous echocardiograms
- B. A prior history of heart failure
- C. The number of pillows used while sleeping
- D. Complaints of decreased exercise tolerance

**Question 30**
Which of the following signs, when present, is extremely *specific* for heart failure?

- A. Wheezing
- B. Rales
- C. 3*rd* heart sound (S3)
- D. Hepatojugular reflux

**Question 31**
Acute and critical care nurses should be aware that the majority of blunt force chest trauma occurs as a result of:

- A. Acts of violence
- B. Pedestrian accidents
- C. Falls
- D. Motor vehicle accidents
**Question 32**
A patient diagnosed with hypertrophic cardiomyopathy, in the observation unit with complaints of palpitations, develops new-onset atrial fibrillation. The *priority* intervention for this patient would be to:

- A. Begin anticoagulation with warfarin to decrease the risk of embolization
- B. Prepare for cardioversion to convert the rhythm
- C. Administer drugs to slow the heart rate
- D. Infuse normal saline to enhance cardiac output

**Question 33**
A patient with a history of sustained ventricular fibrillation receives an implantable cardiac defibrillator. Patient teaching includes knowledge that:

- A. The greatest risk of possible shock usually occurs within the first month after implantation
- B. Electromagnetic interference is no longer a concern with contemporary devices
- C. Patients can resume driving in 3 months
- D. The device will not fire if it senses an intrinsic beat from the patient

**Question 34**
A 72-year-old patient is being treated in the ED after a motor vehicle accident. The patient was in the driver’s seat, wearing a three-point restraint, and hit a guardrail. The airbag deployed. Initial assessment reveals two fractured ribs (T3, T4), bruising across the chest from the shoulder harness, and a broken wrist. The patient denies loss of consciousness. Other than pain and post-accident anxiety, the patient has no complaints. Vital signs and initial labs are unremarkable. Past medical history includes hypertension and diabetes. The CNS *questions* an order to discharge the patient home after casting because:

- A. People >65 have the highest trauma-related death rate
- B. The location of the rib fractures puts the patient at high risk for abdominal injuries
- C. Older patients with rib fractures can have poor outcomes and should be admitted to the ICU
- D. Older patients have a high incidence of fat embolization syndrome after trauma-related bone fractures

**Question 35**
The CNS is teaching a class on acute myocardial infarction in patients >65 for new graduates. Which of the following points would the CNS be sure to include in the teaching outline?

- A. Older adults are more likely than younger patients to come to the hospital when chest pain starts
- B. Classic signs of crushing chest pain radiating to the left arm are more pronounced in older adults
- C. In people > 85, acute MI may present as acute mental status changes or other neurologic symptoms
- D. Afterload reduction is not a good option for older adults

**Question 36**
In the treatment of cardiogenic shock, one reason older patients may not respond to inotropic agents in the same way as younger patients may be:

- A. Hyper-responsiveness to beta receptor stimulation
- B. An increase in the number of pacemaker cells
- C. A decrease in diastolic pressures
- D. Down-regulation of beta-adrenergic receptors
Question 37
An elderly patient, status post anterior wall MI, has SBP <90 mmHg, MAP <60 mmHg, pulmonary capillary wedge pressure (PCWP) <15 mmHg, and cardiac index <2.2 L/min/m². Which of the following interventions is the best choice to increase cardiac output?

A. Administration of packed red blood cells
B. Infusion of 1-2 L of crystalloid or colloids
C. Initiation of vasopressor agents
D. Initiation of inotropic agents

Question 38
Which of the following signs is indicative of the early stage of cardiogenic shock?

A. Oliguria
B. Cyanosis
C. Cool extremities
D. Altered mental status

Question 39
Which of the following laboratory tests should be monitored daily whenever titrating HF medications for a patient with acute HF, according to published guidelines?

A. Complete blood count
B. Serum electrolytes, urea nitrogen, and creatinine
C. Serum B-type natriuretic peptide (BNP)
D. Glucose, fasting lipid profile, and liver function

Question 40
The nurse calls you to evaluate a patient, status post aortic valve repair. The patient is lethargic, with: BP 89/60 mmHg, HR 124, RR 28, T 37°C. Extremities are cool, clammy, and mottled; capillary refill is >4 seconds. Urine output is <0.05 mL/kg/hour. A diastolic murmur is noted. The most likely diagnosis is:

A. Cardiogenic shock
B. Distributive shock
C. Hypovolemic shock
D. Septic shock

Question 41
The CNS is planning an educational program for patients with peripheral vascular disease. Which comment about lifestyle changes would indicate a need to clarify expectations with the group?

A. “I need to quit smoking immediately!”
B. “The dietitian can help me plan healthy meals with foods that I like”
C. “Reducing my risks can possibly halt the progression of this disease”
D. “I need to join a gym to really benefit from an exercise program”
**Question 42**

When providing discharge teaching about angiotensin-converting enzyme inhibitors, important information includes the need for:

A. Regular monitoring of liver function  
B. Avoiding NSAIDs as they can reduce the effectiveness of the medication  
C. Recognizing that the development of a dry cough or angioedema is a sign of allergy to the medication  
D. Increasing sources of potassium in the diet

**Question 43**

A patient presents to the ED with complaints of his heart “racing” and shortness of breath. Heart rate is 160, BP 110/70; the patient has no cardiac history. A 12-lead ECG is performed. The regular rhythm shows a triphasic RBBB pattern (with a taller right peak) in V1 and V6, p waves are noted, and QRS complex of 0.14 ms. A diagnosis of SVT with aberrancy is made. The initial intervention to treat this dysrhythmia is:

A. Vagal stimulation  
B. Administer 6 mg adenosine IVP  
C. Administer 5 mg verapamil slow IVP  
D. Synchronized cardioversion

**Question 44**

In the middle of synchronized cardioversion, a patient with a narrow QRS complex tachycardia develops VF. The CNS should immediately:

A. Increase the energy output to 200 joules  
B. Increase the gain on the monitor  
C. Turn off synchronization mode  
D. Administer another dose of midazolam and fentanyl

**Question 45**

A patient is admitted to the unit after a coronary stent placement in his left anterior descending artery. The bedside nurse attaches the 5-lead system cardiac monitor. For accurate ST-segment monitoring, which lead is the best one to choose as the primary monitoring lead for this patient?

A. Lead I  
B. Lead II  
C. Lead V1  
D. Lead V3
Question 1
A patient with a history of pancreatic adenocarcinoma presents with low serum sodium concentration (121 mEq/L) and serum hypoosmolality (260 mOsm/kg H₂O) consistent with syndrome of inappropriate antidiuretic hormone (SIADH). Which of the following is an appropriate nursing intervention?

A. Initiate seizure precautions
B. Allow patient to drink as much water as he can to help reduce risk for dehydration
C. Keep patient flat in bed to increase venous return
D. Initiate neurologic assessment every 4–6 hours

Question 2
Which of the following is most important to do when educating a patient being discharged with chronic SIADH?

A. Discuss signs of peripheral edema
B. Encourage patient to increase fluid intake to ≥2000 mL/day
C. Encourage fluid restriction to 800–1000mL/day
D. Encourage reduced salt intake to reduce thirst

Question 3
A patient with a history of hypothyroidism and who is being treated with levothyroxine (Synthroid) 112 mcg daily complains of increasing fatigue, weight gain, and tingling in fingers bilaterally. Lab results show a normal basic metabolic panel but an elevated TSH level of 8.7. He states he is taking his levothyroxine daily in the morning with his multiple daily vitamin about 1 hour before breakfast. How should the CNS treat his elevated TSH level?

A. Increase his levothyroxine dosage
B. Recommend taking the levothyroxine on an empty stomach without the multivitamin
C. Have patient take levothyroxine with his meal
D. Order a thyroid ultrasound to check for a nodule

Question 4
A young woman with type 1 diabetes and hyperthyroidism is brought to the ED by her boyfriend. She was without her oral medications while out of town for a month; now she has been home 1 week with nausea and vomiting and a new onset of altered mental status. Her insulin pump is currently attached. Vital signs show her to be febrile at 38.3°C and tachycardic at 120 bpm, with blood glucose of 215 mg/dL, mild serum ketones, TSH undetectable, and mild leukocytosis. Based on medical history and the lab results, what is the most likely diagnosis?

A. Diabetic ketoacidosis (DKA)
B. Thyroid storm
C. Grave’s disease
D. Gastroenteritis
Question 5
A patient sustained a traumatic brain injury in a motor vehicle accident. The bedside nurse is concerned about her increased urine output. Serum sodium level on AM labs was elevated at 152 mEq/L, serum glucose level was 116 mg/dL, and serum osmolality was 320. Further testing shows a urine osmolality of 170 mmol/L and urine specific gravity <1.005. Based on lab results, what is the mostly likely diagnosis?

A. Diabetes insipidus  
B. Diabetes mellitus  
C. Syndrome of inappropriate antidiuretic hormone  
D. Overhydration with IV fluids

Question 6
The CNS is helping to develop a patient teaching sheet for patients who are discharged home with a diagnosis of diabetes insipidus. Which of the following would not be appropriate to include on the discharge information sheet?

A. Techniques to prevent dehydration  
B. Recommendation to wear a medical alert bracelet  
C. Recommendation to seek medical attention if the patient develops diarrhea or vomiting  
D. Recommendations for fluid restriction of 800–1000 mL/day

Question 7
A patient presents with complaints of headache, fatigue, confusion, and lethargy occurring every 3–4 days when she skips breakfast. She reports that she typically feels better after eating a candy bar at such times. When this occurred a few days ago, she borrowed a friend’s glucose meter and discovered her blood glucose level was 43 mg/dL. In the office, her vital signs are stable; point-of-care glucose test is 130 mg/dL non-fasting, and her neurologic exam is normal. What test(s) would be appropriate to order?

A. MRI of abdomen to assess for insulinoma  
B. Order a 72-hour fast test  
C. None, but instruct patient not to skip meals  
D. Mixed-meal tolerance test

Question 8
What should be done if a patient is unconscious from hypoglycemia?

A. Massage thin liquid glucose, such as juice, into his gums  
B. No treatment; hepatic glucose output will raise blood glucose levels  
C. Give glucagon or IV dextrose  
D. Increase D5NS IV drip rate
Question 9
The CNS is helping with discharge planning for an elderly patient newly diagnosed with type 2 diabetes. Discharge orders are for subcutaneous insulin. The RN is concerned about sending the patient home on insulin because she has significantly diminished visual acuity, dexterity issues secondary to arthritis, and lives alone. The most appropriate action for the CNS is to:

A. Tell the RN to continue teaching the patient on insulin injections, with repeat demonstration
B. Acknowledge the RN's concerns and discuss them with the treatment team, suggesting that a different route for the medication may be advisable
C. Arrange for the home health agency to give the injection to the patient at home
D. Provide the patient with written instructions on how to given an insulin injection

Question 10
Which of the following are considered risk factors for the development of type 2 diabetes in adults?

A. Obesity, history of gestational diabetes, hyperlipidemia
B. High-carbohydrate diet, weight gain, hypertension
C. Hypothyroidism, physical inactivity, hypertension
D. High-carbohydrate diet, weight loss, physical activity

Question 11
A staff nurse reports that she thinks she sees an increased incidence of hypoglycemia and she questions the current insulin order sets. The best course of action for the CNS is to:

A. Tell the nurse that she needs to follow the current orders
B. Propose a change to the current insulin orders
C. Assure the nurse that hypoglycemia can be expected with insulin treatment
D. Start a chart review to assess hypoglycemia rates on the units

Question 12
The CNS is helping to develop an insulin drip protocol for postoperative hyperglycemia in the ICU. The CNS knows that the evidence-based blood glucose targets for these patients are:

A. 90–110 mg/dL
B. 140–180 mg/dL
C. ≤200 mg/dL
D. Pre-meal blood glucose <140 mg/dL and random blood glucose <180 mg/dL

Question 13
The CNS is teaching nurses about the administration of glucocorticoid steroids for acute transplant organ rejection. What is the best explanation for why glucocorticoids can cause hyperglycemia?

A. Glucocorticoids are generally given in a dextrose-containing solution
B. Glucocorticoids increase insulin production
C. Glucocorticoids increase appetite
D. Glucocorticoids inhibit glucose uptake into muscle
**Question 14**
Which of the following is a correct statement about DKA and hyperglycemic hyperosmolar syndrome (HSS)?

A. Both occur with type 1 diabetes  
B. Both cause a low bicarbonate (CO₂) level  
C. Both occur rapidly  
D. Both occur due to lack of insulin

**Question 15**
How is DKA diagnosed?

A. Hyperglycemia (BG >250 mg/dL), low arterial pH (<7.35), elevated anion gap (>13 mEq/L)  
B. Hyperglycemia (BG >600), hyperosmolarity (serum Osm >320 mOsm/L), arterial pH > 7.3  
C. Positive serum ketones, hyperglycemia (BG >300 mg/dL), higher arterial pH (>7.5)  
D. Positive urine ketones, hyperkalemia (6.1 mEq/L), hypernatremia (132 mEq/L)
Question 1
What are the two most common complications that nurses need to be educated about in the conservative management of hemodynamically stable patients with blunt force abdominal trauma?

A. Peritonitis and GERD  
B. Hemorrhage and peritonitis  
C. Renal failure and liver failure  
D. GI bleeding and renal failure

Question 2
Which physical assessment finding occurring hours to days after a blunt force abdominal injury might indicate the presence of a retroperitoneal hemorrhage?

A. Ecchymosis involving the flanks (Grey Turner’s sign) and umbilicus (Cullen’s sign)  
B. Anuria  
C. Sharp pain on left side of the abdomen under the rib cage  
D. Yellowing of sclera or skin

Question 3
A patient suspected of having an acute upper GI bleed is being managed via aggressive fluid resuscitation; the team is attempting to identify the source of the bleed. Angiography has been unsuccessful. The GI physician is considering selective catheterization of the artery feeding the bleed. Which artery would the GI doctor be most likely to catheterize to find the source of this patient’s upper GI bleed?

A. Inferior mesenteric artery  
B. Internal iliac artery  
C. Celiac artery  
D. Dorsal pancreatic artery

Question 4
A nurse is caring for an oncology patient with inoperable GI obstruction. The patient is experiencing nausea, vomiting, and intense colicky pain. Which medication would be most appropriate to encourage the nurse to request from the patient’s physician?

A. Docusate sodium (Colace)  
B. Diphenoxylate and atropine (Lomotil)  
C. Aspirin  
D. Octreotide (Sandostatin)
Question 5
A patient’s symptoms include abdominal pain, nausea, and elevated temperature (100.3°F). Which diagnostic would the physician most appropriately order as the first choice for a differential diagnosis of gallbladder disease (based on availability, cost, high accuracy and safety) vs bowel obstruction?

A. ERCP  
B. Exploratory laparoscopy  
C. Ultrasound  
D. GI x-ray

Question 6
The CNS is educating ER nurses about the common presentation of GERD. Which life-threatening condition would be included in the educational materials as having a similar presentation to GERD?

A. Pulmonary emboli  
B. Myocardial infarction  
C. GI bleed  
D. COPD exacerbation

Question 7
The ER has seen numerous people during a 72-hour period with the following signs and symptoms: nausea, vomiting, abdominal pain, diarrhea, fever, chills, headache, muscle pains, and blood in the stool. All patients attended the same wedding. A diagnosis of Salmonella emerges, with homemade mayonnaise being the bacterial source. All of the following are complications of Salmonella EXCEPT:

A. Dehydration  
B. Bacteremia  
C. Meningitis  
D. Gastroesophageal reflux

Question 8
The CNS is planning an educational session for nurses who are going to work in a regional bariatric surgery center. When putting together the content on preventing the postoperative complication of dumping syndrome, the nurses will be encouraged to include the following points in their patient teaching, EXCEPT:

A. Several small meals  
B. Fewer, larger meals  
C. Resting after eating  
D. Increase in complex CHO, avoiding simple CHO
**Question 9**
The CNS is providing preoperative teaching to a patient with a history of HF, HTN, and COPD and who is undergoing colostomy surgery. It is most important that the patient understands the need to stop taking which of the following medications before surgery?

A. Furosemide (Lasix)  
B. Digitalis (Digoxin)  
C. Prednisone (Deltasone)  
D. Aclidinium bromide (Tudorza Pressair)

**Question 10**
Patients with complications associated with hepatic encephalopathy are at risk for which of the following group of adverse events?

A. VAP, falls, wrong-site surgery  
B. Falls, CLABSI, CAUTI  
C. Wrong-site surgery, surgical-site infection, VAP  
D. VTE, surgical-site infection, postoperative foreign object retention

**Question 11**
The CNS is helping nurses at a hepatitis clinic teach patients about the two most common side effects of evidence-based treatment for hepatitis C. She would be most likely to instruct the nurses to teach patients about:

A. Attention to sleep, sumatriptan succinate (Imitrex)  
B. Taking medications with food, prochlorperazine (Compazine) prn  
C. Nutritional supplements, eating snacks with protein  
D. Avoiding caffeine at night, use of diphenhydramine (Benadryl) prn

**Question 12**
The CNS is caring for a 67-year-old female with chronic alcohol abuse, mild dementia, and malnutrition. Which lab results would the CNS expect to see for this patient?

A. Albumin 3.9 g/dL; prealbumin 15.1 mg/dL; serum transferrin 205 mg/dL; total lymphocyte count 1530/mm³; total cholesterol 165 mg/dL  
B. Albumin 2.8 g/dL; prealbumin 17.6 mg/dL; serum transferrin 199 mg/dL; total lymphocyte count /1605 mm³; total cholesterol 205 mg/dL  
C. Albumin 5.1 g/dL; prealbumin 18.8 mg/dL; serum transferrin 178 mg/dL; total lymphocyte count 1610/mm³; total cholesterol 140 mg/dL  
D. Albumin 2.7 g/dL; prealbumin 9.3 mg/dL; serum transferrin 105 mg/dL; total lymphocyte count 1207/mm³; total cholesterol 114 mg/dL
**Question 13**
The CNS is consulted by a nurse caring for a patient with hyperemesis. This patient prefers holistic approaches to health, and has asked that her healthcare team provide natural-based therapies for her nausea/vomiting. The team has asked the CNS to make recommendation for treating this patient. The most appropriate treatment choice is:

A. St. John’s wart and echinacea
B. Vitamin C and black cohosh tea
C. Ginger or chamomile tea, aromatherapy with lavender or peppermint oils
D. Cod liver oil and calcium supplements

**Question 14**
A patient with chronic pancreatitis (CP) and intermittent exacerbations of acute pancreatitis is at risk for which of the following long-term complications:

A. Fatty liver and hypokalemia
B. Nutrient malabsorption and diabetes mellitus
C. Gallstones and hyponatremia
D. Renal failure and hyperkalemia

**Question 15**
A patient is admitted with cirrhosis. Which of the following assessments would indicate the development of portal hypertension and would require immediate attention?

A. Hematemesis
B. Asterixis
C. Confusion
D. Decreased urine output
Question 1
Which of the following anemias is a result of increased destruction of erythrocytes?

A. Iron deficiency anemia  
B. Sickle cell anemia  
C. Pernicious anemia  
D. Anemia of chronic inflammation

Question 2
42-year-old female complains of extreme fatigue and inability to perform normal activities of daily living. The following information has been collected from the patient:
- Heavy menstrual periods, lasting about 1 week, occurring every 21 days
- Dieting to lose 20 pounds
- Exam: thin, pale woman with spoon-shaped fingernails and angular stomatitis

The most likely diagnosis for this patient is:

A. Iron-deficiency anemia  
B. Autoimmune hemolytic anemia  
C. Anemia of chronic inflammation/disease  
D. Pernicious anemia

Question 3
42-year-old female complains of “feeling too exhausted” to get out of bed or take a shower after surgery. The CNS collects the following information from the patient:
- She indicates her menstrual periods were very heavy, lasting about 1 week and occurring every 21 days
- Reports she’s been dieting to lose 20 pounds
- Exam: thin, pale woman with spoon-shaped fingernails and angular stomatitis

Which lab tests would the CNS anticipate being ordered to confirm the diagnosis suspected?

A. CBC, bone marrow biopsy  
B. Serum ferritin level, RBC indices  
C. Bone marrow biopsy, blood smear  
D. Methylmalonic acid and homocysteine levels

Question 4
A new nurse asks the CNS for assistance in assessing a patient with bone metastasis with demineralization. The nurse is concerned because the patient seems confused—a change from yesterday. The CNS explains that a change in mental status is a significant sign of which complication of malignancy?

A. Spinal cord compression  
B. Tumor lysis syndrome  
C. Superior vena cava syndrome  
D. Hypercalcemia
Question 5
The CNS is reviewing the evidence base for possible updates to the policy and procedure on immunocompromised patients. Which of the following methods to prevent infection has a high level of evidence to support its inclusion in the policy?

A. Place all high-risk patients on a “neutropenic diet”
B. Teach patients to drink only processed drinks or bottled water
C. Encourage patients to limit interaction with pets, small children, and public crowds
D. Administer IVIG for immunoglobulin (IgG) levels of <300 mcg/dL

Question 6
When rounding in the unit, the CNS questions the staff nurse about a patient with a history of heparin-induced thrombocytopenia (HIT) getting heparin flushes through her radial arterial line. The patient is asymptomatic. The best action for the CNS to take next is to direct the nurse to:

A. Immediately institute DVT precautions
B. Immediately discontinue all heparin therapy/exposure
C. Continue the heparin flushes and monitor for signs of thrombocytopenia
D. Start a nonheparin anticoagulant per protocol

Question 7
The CNS plans an inservice for staff nurses who care for patients with thrombocytopenia. To prevent iatrogenic injury, it is important that the nurses are aware of:

A. A greater risk of febrile and allergic reactions from platelets than from RBCs
B. A greater risk of infection in patients receiving platelet transfusions
C. The need to take noninvasive blood pressures every hour
D. How to administer platelet growth factors safely

Question 8
The standard platelet level threshold to prevent bleeding before invasive procedures, surgery, or therapeutic anticoagulation is:

A. 20,000/mm$^3$
B. 50,000/mm$^3$
C. 100,000/mm$^3$
D. 150,000/mm$^3$

Question 9
An increase in red cell mass stimulates the kidneys to:

A. Increase arterial oxygen saturation
B. Decrease cardiac output
C. Increase reticulocyte production
D. Decrease erythropoietin production
Question 10
The CNS is teaching a class on caring for patients with severe coagulopathies. Which points are critical to include in a plan of care about massive blood transfusions?

A. Blood warmer use, coagulation factor replacement, possible calcium replacement  
B. Monitoring for fluid volume overload, hypercalcemia, hyperthermia  
C. Assess for petechiae, ecchymosis, bleeding around IV sites before transfusion  
D. Consult with hematology to start erythrocyte growth factors post-transfusion, get patient consent, premedicate with acetaminophen (Tylenol) and/or diphenhydramine (Benadryl)

Question 11
A patient with an increase in platelet count of 10,000 after a transfusion of 10 units of platelets

A. A patient with an increase in platelet count of 10,000 after a transfusion of 10 units of platelets  
B. A patient with an increase in platelet count of 50,000/mm³ after a transfusion of 10 units of platelets  
C. A low-injury, low-risk patient with a platelet count of 50,000/mm³  
D. A low-injury, low-risk patient with a bleeding time of 180 seconds

Question 12
An elderly patient with progressively worsening gram-negative pneumonia admitted 2 days ago. Antibiotics were started. The patient is mechanically ventilated on an FiO₂ of 60%; HR 136, BP 146/78, RR 24, T 102.4 °F; acetaminophen and IV NS bolus administered. Petechiae are noted over chest; tips of fingers and toes are blue; bright red blood is oozing from IV sites and around the urinary catheter. Which of the following orders is a priority for this patient?

A. Hypothermia blanket  
B. Chest radiograph  
C. Repeat blood cultures  
D. DIC panel

Question 13
Age-related changes in the immune system that are most likely to account for the increase in autoimmune disorders in the elderly include:

A. Breakdown in nonspecific (innate) immunity physical and biochemical barriers  
B. Reduced number of circulating immune surveillance cells to recognize abnormal cell growth  
C. Decrease in the number of phagocytes, monocytes, neutrophils, macrophages, and natural killer cells  
D. Impairment of immune system tolerance to self-antigens

Question 14
The major goal of medical treatment for patients with DIC is to:

A. Recognize patients at high risk  
B. Identify and treat the underlying cause  
C. Start a heparin drip as soon as DIC is diagnosed  
D. Administer fibrinolytics to dissolve established microemboli
**Question 15**
A 40-year-old female patient with a primary diagnosis of SLE is admitted for glomerulonephritis. The CNS must be knowledgeable about which common complication of SLE?

A. Depression  
B. Hyperactivity  
C. Hypoactivity  
D. Dementia

**Question 16**
Which comment by a patient being discharged after treatment for anemia of chronic disease would indicate a need for further education?

A. “I probably won’t need blood transfusions for this condition”  
B. “If I am weak or short of breath, I’ll call my doctor”  
C. “I will drink plenty of fluids to avoid getting dehydrated”  
D. “I’ll need to increase the amount of iron-rich foods in my diet!”
Question 1
An elderly man is admitted with pneumonia and is mechanically ventilated. He has a history of smoking and recently had a significant weight loss. Which of the following are major factors that could contribute to pressure ulcer development in this patient?

A. Age, smoking, and hypertension
B. Shear, friction, and smoking
C. Age, poor nutrition, smoking
D. Poor nutrition, shear, and friction

Question 2
The CNS assists a novice staff nurse to plan care for an adult male paraplegic patient with a stage IV pressure ulcer to the right trochanter. Which of these should the nurse assign the highest priority?

A. Use of a specialty mattress and turning every 2 hours
B. Use of absorptive dressings and turning every 2 hours
C. Administering the prescribed antibiotics and pain medication
D. Administering the prescribed antibiotics and applying a condom catheter

Question 3
In the acute care setting, a pressure ulcer risk assessment should be conducted with a tool such as the Braden Scale upon admission and then:

A. Every time the patient is turned and bathed
B. Every 24 hours and when the patient’s condition changes
C. Every 48 hours and when the patient’s condition changes
D. Upon discharge and with each transfer to a different unit

Question 4
The most significant risk factor associated with surgical site infection is:

A. Obesity
B. Hyperglycemia
C. Hypothermia
D. Nicotine use

Question 5
The CNS is providing discharge instructions to a patient admitted with lower extremity cellulitis and weepy leg drainage. The CNS knows the most important to tell the patient is:

A. You need to reduce your salt intake; it will make the socks easier to wear
B. You should try to lose weight; the socks will fit easier
C. Wearing the socks will help prevent and manage the swelling
D. You should wear the socks at night to reduce swelling
Question 1
A man was found wandering the woods without a jacket or hat, very confused and disoriented. He had been wintering in a log cabin, using a kerosene heater for warmth. Assessment findings in the ED:

- Chief complaint: Chest pain, generalized weakness
- VS: T 35°C; P 90/min, regular; BP 120/90; RR 22, %O₂ 98%
- Skin color: pink to cherry red, skin turgor normal
- Neuro exam: no focal deficits, oriented to person only
- Lungs sounds clear
- Heart sounds normal, no murmurs, extra sounds
- EKG – within normal limits
- ABG: pH 7.40; PCO₂ 40 mmHg; PO₂ 92 mmHg; %O₂ Saturation 70%
- Carboxyhemoglobin: 40%
- Hemoglobin & hematocrit: 13g/dL & 40%
- Arterial O₂ content: Estimated at 12.7mL O₂/dL of blood

Based on these findings, what would be the most important next step?

A. Initiate oxygen therapy at 100% via a non-rebreather mask
B. Plan for transport of patient to a facility with a hyperbaric chamber
C. Spiral chest CT to rule out pulmonary emboli
D. Stat plain CT of the brain to rule out stroke

Question 2
The nurse caring for a patient with multiple left leg fractures reports that the left calf has grown in circumference over the last 12 hours and the leg is warm; distal pulses are obtained by Doppler; the skin color has not changed. The CNS measures the interstitial compartment pressure of the left leg as 50 mmHg. The blood pressure is 90/50 mmHg; HR 100; the patient is afebrile, on ventilator with assist control ventilations; %O₂ 98%. Based on these findings, the CNS should:

A. Advise the staff nurse to continue monitoring the patient; no treatment changes needed
B. Obtain another interstitial pressure measurement in one hour, and notify the appropriate physician if it has increased
C. Initiate fluid management protocol to maintain mean arterial pressure to 70 mmHg
D. Stat page the appropriate physician and report findings

Question 3
The family of a patient in multisystem organ failure is struggling with end-of-life decisions. They approach the CNS with concerns that the patient has developed a sacral pressure ulcer. They are concerned that the staff nurses are not properly caring for the patient since they know she is dying. What would be the best way for the CNS to respond?

A. Tell the family, “As a person dies, all organs begin to fail, including the skin. We will keep your loved one comfortable”
B. Suggest that the family address the issue of poor nursing care with the nurse manager
C. Consult the wound & skin CNS for wound debridement
D. Request an order for betadine soaks to the wound
Question 4
A nurse is caring for a patient in septic shock. The CNS is explaining the proper way to interpret the findings of the passive leg-raise test to assess for fluid responsiveness. The stroke volume index (SVI) is at 28 mL/m² per beat prior to the passive leg-raise and 35 mL/m² per beat with the passive leg-raise. Up to this point, the patient had been treated with IV crystalloids. The passive leg-raise test results indicates that the patient needs:

A. Diuresis  
B. Inotropes  
C. More IV fluids  
D. Vasopressors

Question 5
A man decides to run a half marathon despite his lack of training. On a hot Saturday afternoon, he proceeds with his run. At mile 7, he collapses and is brought to the ED via EMS. Upon arrival, his skin is hot and dry. His temperature is 105°F, heart rate is 140 sinus tachycardia, blood pressure 90/60 mmHg
   - Fluid resuscitation is initiated, as are cooling procedures
   - A urinary catheter is inserted, and reddish brown urine returns. Urinalysis shows a large amount of blood but an absence of RBCs
Based on this presentation and urinalysis results, what complication of heat stroke is this man exhibiting?

A. Hypercalcemia  
B. Hyperthermia  
C. Acute cardiac failure  
D. Rhabdomyolysis

Question 6
A novice nurse asks the CNS to help him figure out how best to manage the vasoactive drips and IV fluid orders on his patient recovering from hypovolemic shock. Currently, the patient is on norepinephrine (Levophed) at 200 mcg/min, normal saline at 150 mL/hr. The patient weighs 100 kg. Her hemodynamics are as follows:
   - RR 26; SaO₂ 95%; HR 110/minute; MAP 80 mmHg; CO/CI 3.0/1.4; Systemic vascular resistance 2051 dyn/s/cm⁻⁵
Based on the patient’s hemodynamic profile, the CNS would advise the novice nurse to:

A. Make no changes, continue monitoring the patient  
B. Implement the fluid resuscitation protocol  
C. Request an order for an inotrope  
D. Wean the norepinephrine (Levophed)

Question 7
The CNS determines that a patient has been on nitroprusside (Nipride) at approximately 3 mcg/kg/minute for the last 3 days. The patient is complaining of headache, anorexia, and difficulty breathing; the patient’s serum CO₂ is 17 mEq/L. The CNS suggests to the clinical pharmacist and the intensivist that it is time to consider changing the patient to an alternate antihypertensive. The most logical reason for this recommendation is:

A. The cost of nitroprusside is great compared with other antihypertensives  
B. Nitroprusside has a diminished effect in the presence of acidosis  
C. Prolonged exposure to nitroprusside causes hepatic toxicity  
D. Use of nitroprusside can cause thiocyanate toxicity
Question 8
In developing an interdisciplinary performance improvement project to implement the sepsis bundle, the CNS should first:

A. Develop a physician’s order set covering all aspects of the bundle  
B. Identify key stakeholders in the process  
C. Review the research for a valid and reliable sepsis screening tool  
D. Convey to the interdisciplinary team how each member is not following the sepsis bundle

Question 9
The CNS is working with the infection control practitioner to contain an outbreak of *Clostridium difficile* diarrhea. Strategies decided upon include cohorting the infected patients in one wing with private rooms. An antibiotic stewardship program has been initiated. What other measure would best assist in preventing the spread of the *C diff* diarrhea?

A. Initiate clindamycin (Cleocin) per *C diff* protocol  
B. Using a single-patient-use bath basin for patient hygiene  
C. Washing hands before and after a patient encounter  
D. Healthcare team members wearing a mask when transporting an infected patient

Question 10
A hemodynamically unstable patient in shock is actively undergoing resuscitation with IV fluids, vasopressors, and ventilator support. The dietitian asks if it would be appropriate to initiate nutritional support at this time. The CNS’s most appropriate response should be:

A. Gastric feedings may be started, but hold the feeding if the gastric residual volume is >100mL  
B. Keep the patient NPO until extubated and able to swallow  
C. Keep the patient NPO until hemodynamically stable  
D. Post-pyloric feeding with trickle feeds should be initiated

Question 11
A trauma patient has bilateral femur fractures and a T3 spinal cord injury. The patient has a MAP of 53 mmHg, and a heart rate of 45 (sinus bradycardia). The systemic vascular resistance is 500 dynes/sec/cm-5. The patient is not bleeding; hemoglobin and hematocrit have been stable. Based on this presentation, the patient is most likely exhibiting what type of shock?

A. Cardiogenic  
B. Hypovolemic  
C. Neurogenic  
D. Spinal
**Question 12**
While rounding in the surgical ICU, the CNS observes an intubated patient who is recovering from a thoracotomy. The patient is grimacing, restless and unable to self-report pain. However, the Critical-Care Pain Observation Tool (CPOT) score of 4 indicates that the patient is in pain. The CNS approaches the patient’s nurse and asks how the pain is being managed. The nurse replies, “He is currently on a fentanyl (Sublimaze) drip, 25 mcg/hour. I do not want to go up any higher, as his blood pressure is borderline low.” The CNS’s advice to the ICU nurse should be:

A. Keep the fentanyl drip at the current rate until the patient is more hemodynamically stable  
B. Keep the fentanyl drip at the current rate and increase the rate of the continuous sedative drip  
C. Increase the fentanyl drip until the pain is controlled. Contact the physician/ nurse practitioner if hypotension develops  
D. Position the patient on the operative side

**Question 13**
An ICU nurse is managing a patient who is 8 hours post-op from major abdominal surgery. The patient is sedated, intubated, and unable to self-report. The nurse tells the CNS that the patient’s heart rate and blood pressure are elevated and, based on this assessment, the patient needs pain medication. What should the CNS advise?

A. Give the pain medication as ordered  
B. Use the Wong-Baker Faces to determine the patient’s pain level  
C. Vital signs do not correlate well with pain  
D. Reassess the patient in 30 minutes

**Question 14**
A patient in the cardiothoracic step-down unit is on post-op day 4 recovering from coronary artery bypass surgery. The patient’s family and ICU nurse are concerned, as the patient has had persistent anorexia, nausea, and constipation. The family is also concerned that the patient appears confused and does not know where he is. The intensivist reassures the family that diagnostic testing does not indicate any physical problems. The CNS recommends a palliative care team consult. The ICU nurse replies, “Why palliative care? My patient isn’t dying!” How should the CNS respond to the ICU nurse’s comment?

A. A palliative care consult will help keep the family calmer and less nervous  
B. The emphasis of the palliative care consult is pain and symptom management; it is integral with curative care  
C. The palliative care team knows how to treat distressing symptoms better than the ICU team  
D. Utilizing palliative care in the ICU is considered best practice so the nurses can focus on other care

**Question 15**
The CNS is leading an interdisciplinary family conference for a patient in a persistent coma. The purpose of the conference is to discuss continuing curative care or to withdrawing life support and allowing a natural death. The multiple family members cannot come to terms with a decision. The most appropriate statement by the CNS would be:

A. This is a difficult decision, go home and discuss it among yourselves and let us know your decision tomorrow  
B. If he could speak for himself, what do you believe he would choose?  
C. What does your clergyperson advise—or would you like me to call our chaplain?  
D. Case management states he has used up all his hospital days and will need to be transferred to a nursing home if a decision cannot be reached
Question 16
The CNS has been asked to develop an evidence-based protocol for the management of the patient in hemorrhagic shock. A review of the evidence shows which of the following should be the initial fluid of choice for resuscitation?

A. Blood transfusion  
B. Colloids  
C. Crystalloids  
D. Fresh frozen plasma

Question 17
A patient suffered a ventricular fibrillation arrest. Forty-five minutes after aggressive CPR and ACLS, she had a return of spontaneous circulation, yet she was unresponsive. Therapeutic hypothermia was initiated for 24 hours. She is now 3 days post the re-warming period. Her Glasgow Coma Scale (GCS) is 5 when off sedation. A CT of the brain shows blurring of gray-white junction and sulcal effacement, with diffuse cerebral edema. The patient’s family is aware of these findings and asks the CNS to explain what it all means. The best response by the CNS would be to tell the family that the CT scan results and GCS rating indicate that the patient:

A. Is brain dead  
B. Is in a persistent vegetative state  
C. Has a suffered a lack of oxygen to the brain  
D. Will require drainage of the edema fluid

Question 18
The CNS is revising the central line protocol. The current protocol requires:

• Hand hygiene  
• Use of sterile, disposable surgical gowns, masks, hats, and gloves  
• Preparation of the skin site with chlorhexadine solution  
• Full sterile draping of the patient  
• Optimal catheter site selection, with avoidance of the femoral vein  
• Daily review of line necessity, with prompt removal of unnecessary lines or changing the central line every 7 days, whichever comes sooner  
• Scrubbing of the injection port with alcohol for 15 seconds prior to IV injections

Based on this protocol, what requirement should the CNS add or change to make it evidence-based?

A. Perform a sterile surgical scrub prior to line insertion  
B. Use a ¾ sterile drape for the patient  
C. Daily review of line necessity with prompt removal of unnecessary lines  
D. Scrub the injection port with chlorhexadine for 30 seconds prior to IV injections
Question 19
A patient is currently minimally responsive and ventilator-dependent. His underlying condition is end stage. The family is aware that there is no hope for a meaningful recovery. They state it is time to honor his advance directives, withdraw life support, and allow a natural death. The healthcare team agrees with the family's decision. The CNS meets with the family to explain the withdrawal process and what the family might anticipate happening. The CNS assures the family that the patient will be kept comfortable and pain-free, and that a continuous infusion of morphine will be started. The wife exclaims that he would not want euthanasia but wants to die a natural death. What should the CNS say to the wife?

A. “It may be difficult for you to watch him suffer as he dies if he is not given morphine”
B. “He is dying of his disease; the goal of care is to relieve his pain and suffering”
C. “Let me contact the chaplain for you”
D. “We will honor his wishes, and not start a morphine drip”

Question 20
The patient had blunt abdominal trauma, resulting in a ruptured spleen. Day 1 post-op from a damage control laparotomy, he is on the ventilator and receiving a continuous fentanyl (Sublimaze) drip for pain and a Propofol (Diprivan) drip for sedation. His vital signs are: T 37.5°C; P 110 sinus tachycardia; MAP 80 mmHg. His intra-abdominal pressure has been at 15 mmHg consistently for the past 6 hours. The nurse asks the CNS what interventions can be done to lower the intra-abdominal pressure. The best response by the CNS would be:

A. Ensure the abdominal binder is fastened securely
B. Place the patient in reverse Trendelenberg position
C. Position the patient in a Fowler’s position of 45°
D. Turn the patient to a lateral recumbent position

Question 21
The CNS has identified a significant safety issue. The best way to deal with this safety issue would be to:

A. Refer the issue to the hospital safety officer
B. Complete a detailed incident report each time the issue arises
C. Call the interdisciplinary unit team together to resolve the safety issue
D. Review the literature for best practices and develop a process improvement plan

Question 22
A patient is mentally competent but speaks only a little-known indigenous dialect of Guatemala. A surgical procedure is necessary to save her life. None of the healthcare team speaks the patient’s language. Which one of the following persons would be the most appropriate to use for interpretation?

A. Husband
B. Mother
C. Patient’s clergyperson
D. Professional interpreter
Question 23
The patient is admitted following a motorcycle crash; he was wearing a helmet. He has a right closed femur fracture and an “open book” pelvic fracture. On his second day in the unit, he complains of severe shortness of breath and dyspnea. His vital signs are T 99°F; P 130 sinus tachycardia; BP 90/60; RR 33. His breath sounds have diffuse crackles in all lung fields; the nurse observes petechiae on his upper chest. ABGs on a 100% non-rebreather mask are pH 7.30; pCO₂ 60; pO₂ 72 Sat 82%; and HCO₃ 25. His chest x-ray shows bilateral diffuse infiltrates. CBC shows a hemoglobin 9 gm, HCT 27%, WBC 11,500, and platelets 50,000. This patient’s condition is most likely due to:

A. Acute respiratory distress syndrome (ARDS)/ acute lung injury (ALI)
B. Compartment syndrome
C. Fat embolism
D. Pulmonary thromboembolism

Question 24
In preparing an in-service on the management of the patient with an anaphylactic reaction, the CNS would want to stress that the most important initial action/intervention would be to:

A. Identify the causative agent
B. Administer IV fluids to maintain the mean arterial pressure
C. Initiate supplemental oxygen
D. Maintain a patent airway

Question 25
The CNS is helping a nurse apply the new sepsis screening tool. The nurse determines that the patient has a fever of 101°F, HR 103, BP 87/50 mmHg, RR on room air 18/minute. Pertinent labs are WBC 14,000mm³, urine culture with >100,000 colonies of *Escherichia coli*, and a lactic acid level of 4mmol/L. These findings indicate the patient meets criteria for:

A. Systemic inflammatory response syndrome (SIRS)
B. Sepsis
C. Severe sepsis
D. Septic shock

Question 26
A recent recipient of a kidney transplant develops a cytomegalovirus (CMV) infection in the post-transplant period. What would be the most common presentation of this infection?

A. Encephalitis
B. Mononucleosis-type illness
C. Nonalcoholic steatohepatitis
D. Pneumonia
Question 27
A patient is being admitted with viral meningitis. The nurse asks the CNS what type of isolation precautions should be set up. The CNS states:

A. Standard precautions
B. Airborne precautions
C. Droplet precautions
D. Contact precautions

Question 28
The CNS is developing a course to educate and guide the nurse in managing the burn patient. In the discussion of the pathophysiology of burns, the CNS would identify that in the initial phase of burn injury (0–72 hours), the major physiologic change would be:

A. Acute lung injury
B. Hyperdynamic and catabolic state
C. Massive capillary leak
D. Sepsis

Question 29
A patient with a history of depression has taken an overdose of doxepin (Sinequan), a tricyclic antidepressant (TCA) and was treated with gastric lavage and activated charcoal. She is currently intubated, lethargic, in sinus tachycardia, with mean arterial pressure of 62 mmHg, a fever of 38°C, and a paralytic ileus. The nurse asks the CNS the best indicator of how severe the overdose is. The best response by the CNS would be:

A. An increased QTc width on the ECG
B. Elevated quantitative serum assay for TCA
C. Elevated qualitative urine immunoassay for TCA
D. Severity of metabolic acidosis in the arterial blood gas

Question 30
Ingestion of which one of the following toxic agents is most likely to cause blindness?

A. Ethanol
B. Ethylene glycol
C. Isopropyl alcohol
D. Methanol

Question 31
Which one of the following burn patients would require priority in being admitted to the ICU?

A. 20-year-old with third-degree burns covering 10% of the body surface area
B. 58-year-old with diabetes and an electrical injury of 220 volts
C. 45-year-old with a hydrochloric acid burn to the arms and back covering 20% of the body surface area
D. 60-year-old with second-degree burns covering 10% of the body surface area and singed nasal hairs who is coughing up profuse carbonaceous sputum
Question 32
The most distressing symptoms for patient and family requiring palliation are pain, anxiety, delirium and:

A. Anorexia  
B. Constipation  
C. Dyspnea  
D. Fatigue

Question 33
The CNS is developing a list of complementary therapies to implement for the purpose of relieving pain and distress. Which one of the following evidence-based therapies would be easiest for the nurse to incorporate into the patient’s care?

A. Aromatherapy  
B. Acupuncture  
C. Music therapy  
D. Therapeutic touch

Question 34
A patient who sustained multiple traumatic injuries 3 days ago is developing the lethal triad of hypothermia, metabolic acidosis, and coagulopathy. What would the CNS anticipate in the initial management of this triad?

A. Active rewarming, fluid therapy to improve oxygen consumption, fresh frozen plasma  
B. Extracorporeal membrane oxygenation (ECMO), sodium bicarbonate IV push, calcium gluconate  
C. Warming blanket, fluid therapy to maintain pulmonary artery pressures, erythropoietin injections  
D. Continuous arteriovenous rewarming, sodium bicarbonate continuous infusion, aminocaproic acid (Amicar) infusion

Question 35
The CNS in a small rural hospital consults the intensivist in the telemedicine unit. The CNS is concerned that a cutaneous drug reaction of an ICU patient may be Stevens-Johnson syndrome. The intensivist concurs and recommends the patient be transferred to a higher level of care. What would be the most appropriate specialty unit to which to transfer this patient?

A. Burn  
B. Cardiovascular  
C. Transplant  
D. Trauma
Question 1
Which of the following is an example of a complication caused by improper reduction or improper immobilization of a bone fracture?

A. Muscle atrophy  
B. Dry, flaky skin  
C. External fixation  
D. Misaligned bone

Question 2
Initial management of musculoskeletal injuries involving the ligaments, tendons, and/or muscles includes which of the following?

A. Neurovascular assessment, immobilization above and below the joint, pain control, closed reduction  
B. Rest, ice therapy, compression, elevation  
C. Wound debridement, antibiotics, skeletal stabilization, soft tissue coverage  
D. Radiographs, immediate reduction, assessment of perfusion status, pain control

Question 3
Which of the following actions by the CNS would be most likely to result in the largest decrease in fall rates in the hospital?

A. Observing each nurse’s use and documentation of fall risk using a reliable risk assessment tool  
B. Ensuring that patient rooms have adequate lighting and adaptive equipment readily available  
C. Providing an inservice on fall reduction to each new group of orientees  
D. Implementing a fall reduction program throughout the institution

Question 4
A novice staff nurse, caring for a military recruit who collapsed after an intense boot camp experience, consults the CNS because he notices the patient’s urine is dark reddish brown in color. Labs show an elevated creatine kinase (CK) level, hyperkalemia, and hypocalcemia. Priorities for care include:

A. Making the patient NPO and turning his IV to TKO  
B. Explaining to the patient that he will need long-term dialysis  
C. Preventing renal failure by administering IV fluids and diuretics  
D. Consulting orthopedics and preparing the patient for a fasciotomy

Question 5
Which of the following traumatic injuries poses the greatest risk for bone or tissue infection?

A. Closed fracture  
B. Open fracture  
C. Pelvic ring fracture  
D. Tibial shaft fracture
Question 6
The CNS is teaching a novice nurse about caring for patients with skeletal (invasive) traction. Which of the following points is considered a priority of care?

A. Removing patient from traction weights for 20 minutes, once a shift
B. Ongoing monitoring for pressure areas
C. Providing pin care with traction or external fixators once a day
D. Performing a neurovascular assessment on admission and at discharge

Question 7
Two days after suffering a fracture of the femur, a patient complains of sudden shortness of breath. Upon examination, the CNS notes that the patient is slightly disoriented, tachycardic, and has a petechial rash on her chest and neck. What is the most probable diagnosis?

A. Reaction to pain medicine
B. Pulmonary embolism
C. Acute respiratory distress syndrome
D. Fat embolism syndrome

Question 8
A 50-year-old patient complains that she has aching, stiff joints in her fingers and wrists when she wakes up in the morning; the stiffness lasts a few hours before improving with activity. Upon examination, she has a fever and her joints feel warm and boggy. The physician orders lab and diagnostic tests. Which results would be most likely, considering the patient’s signs and symptoms?

A. Positive rheumatoid factor; elevated erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), and antinuclear antibody (ANA)
B. Elevated ESR, white blood cell (WBC) count, and uric acid levels in blood and urine
C. Elevated ESR and alkaline phosphatase; HLA-B27 present in serum
D. Complete blood count, ESR, and CRP within normal limits; x-ray normal

Question 9
What type of intervention would be most important to implement to decrease an osteoporotic patient’s fall risk while hospitalized?

A. Provide patient education tailored to the patient’s needs
B. Conduct an environmental assessment of the patient’s hospital room and hallways
C. Include the nurses in analyzing the unit’s fall risk data
D. Collaborate with an interdisciplinary team to address system issues related to falls

Question 10
A patient develops chronic refractory osteomyelitis of the spine. Which of the following interventions has been found to be potentially helpful in treating this chronic condition?

A. Bedrest and passive range of motion
B. Surgical synovectomy
C. Hyperbaric oxygen therapy
D. Dietary supplements of vitamin D
Question 1
A patient has undergone a right hemicraniectomy and durotomy for evacuation of an epidural hematoma and decompression. The CNS addresses patient safety by placing the patient on a pressure-relieving surface and placing a sign at the bedside stating:

A. Do not turn head to the right side
B. Keep head of bed elevated at least 30 degrees
C. Caution: No bone flap on right side
D. Do not elevate head of bed above 45 degrees

Question 2
A new nurse questions an order to keep systolic blood pressure ≤160 mmHg in a patient who has undergone a glue embolization of a left frontal arteriovenous malformation (AVM), considering the AVM has been secured. The CNS explains that the rationale for the blood pressure limit is:

A. To prevent reperfusion hemorrhage into ischemic tissue surrounding the AVM due to vascular steal phenomenon
B. To prevent rupture of the AVM while the embolization material solidifies
C. To prevent cerebral edema at the site of the AVM
D. To prevent reperfusion hemorrhage into ischemic tissue surrounding the AVM due to residual feeding blood vessels

Question 3
A patient with a right frontoparietal glioblastoma multiforme (GBM) is scheduled for transfer to an acute inpatient rehabilitation center following a second debulking of his brain tumor. This patient will be discharged on dexamethasone (Decadron) 6 mg every 6 hours with a gradual taper, phenytoin 300 mg every HS, and temozolomide (Temodar) prior to radiation treatments. In preparation for this transfer, the CNS identifies the following risks for this patient:

A. Hyponatremia, infection, cerebral edema, and seizures
B. Cerebral edema, infection, poor wound healing, and seizures
C. Cerebral edema, infection, poor wound healing, and hypokalemia
D. Cerebral edema, infection, dysrhythmias, and migraine headache

Question 4
A patient who has consented to experimental treatment for a malignant brain tumor, is being prepared for discharge. The CNS adds educational materials on the following topics to the bedside nurse’s teaching of medications, signs and symptoms of complications, and need for follow-up in the neurosurgical clinic:

A. Preventing falls at home
B. The role of hospice
C. A high-protein diet
D. A ketogenic diet
Question 5
The CNS is assisting in the care of a patient thought to have autoimmune-mediated encephalitis who has not shown improvement with high-dose steroid therapy and plasmapheresis. One dose of a chemotherapeutic agent is ordered on a unit where chemotherapy has never been given. The best action for the CNS to take is:

A. Request that the team consider transfer of the patient to an oncology unit  
B. Collaborate with the oncology department or unit to have the medication administered on the home unit  
C. Facilitate chemotherapy certification for a group of nurses in the home unit  
D. Collaborate with a pharmacist to educate the staff on chemotherapy administration process

Question 6
The CNS is consulted on a patient with subarachnoid hemorrhage who is receiving nimodipine (Nimotop) 60 mg every 4 hours and is routinely experiencing a decrease in mean arterial blood pressure below the ordered goal of 90 mmHg following medication administration. The CNS discusses the clinical situation with the nurse and would most appropriately suggest which of the following action(s)?

A. Advocate to the medical team that the blood pressure goal is unattainable and the goal should be adjusted  
B. Advocate to the medical team that the medication be discontinued because of this unacceptable effect  
C. Correlate neurologic assessment findings with the decreases in blood pressure and suggest that the dose of nimodipine be decreased and frequency increased  
D. Continue to monitor the patient, as the nimodipine has been shown to be neuroprotective to patients and must not be discontinued

Question 7
A nurse consults the CNS because she has been told that it is not possible to assess pain or discomfort in a patient in a coma after a traumatic brain injury. Which of the following recommendations will assist this nurse and patient?

A. Existing scales cannot be used to assess pain and discomfort in nonresponsive patients  
B. The nurse should use the visual analog scale to estimate pain and discomfort based on behaviors such as grimacing and agitation  
C. The nurse should use a validated scale for babies, as these scales take observation of behaviors into consideration  
D. The nurse should use a validated scale such as the behavioral pain scale to objectively assess and grade pain behaviors and objective signs of pain

Question 8
The CNS is providing patient education to family members of a patient with a Hunt and Hess grade III subarachnoid hemorrhage, and who underwent surgical clipping for a basilar tip aneurysm. Family ask if the patient’s two teenage children should “be tested for aneurysms.” The CNS’s best response is:

A. No, the teenage children are too young to be at risk for cerebral aneurysm rupture  
B. The patient’s first-degree relatives are at risk and should seek consult for additional information and work-up  
C. If the patient’s children have risk factors for connective tissue disorders, they should seek consult for additional information and work-up  
D. The patient’s immediate and extended family are at risk and should seek consult for additional information and work-up
Question 9
In preparing for the opening of a unit that will care for patients 12 hours post-craniotomy after discharge from an ICU, the CNS is asked to prioritize the top four risks and vulnerabilities for the patient population. The CNS identifies increased intracranial pressure (ICP) and:

A. Electrolyte abnormalities, dehydration, and respiratory impairment
B. Seizures, electrolyte abnormalities, and hemodynamic instability
C. Infection, venous thromboembolism, and hemodynamic instability
D. Seizures, venous thromboembolism, and falls

Question 10
A patient with myasthenia gravis is admitted to a unit where the nurses are unfamiliar with the diagnosis. The CNS raises the awareness of the nurses regarding progressive respiratory failure in these patients and should ensure that which of the following interventions is included in the patient’s plan of care, every 6 hours while awake?

A. Arm abduction test every 6 hours while awake
B. Ptosis test every 6 hours while awake
C. Spirometry for forced vital capacity every 6 hours while awake
D. Calculation of a Tobin index every 6 hours while awake

Question 11
The CNS is educating on the care of patients who received IV recombinant tissue plasminogen activator (r-TPA) for acute ischemic stroke. In addition to frequent vital signs, neuro assessments, and swallow screening, the CNS should include which of the following topics regarding common potentially life-threatening neurologic complications?

A. Management of blood pressure and r-TPA–associated intracerebral hemorrhage
B. Assessment for signs and symptoms of gastrointestinal bleeding and patient/family stroke education
C. Seizure precautions and referral for physical therapy evaluation of residual symptoms
D. Blood glucose monitoring and assess for signs and symptoms of pneumonia

Question 12
A patient post-evacuation of a right subdural hematoma is on mechanical ventilation and has an intraparenchymal intracranial pressure (ICP) monitor in place. The CNS is assisting a new RN in troubleshooting the ICP monitor that is no longer demonstrating a waveform. The CNS is most likely to direct the nurse to do which of the following first?

A. Ensure the monitoring catheter and drainage tubing are not kinked
B. Perform a neuro assessment
C. Inspect the dressing to ensure that the catheter has not been dislodged
D. Recalibrate the ICP monitor
Question 13
When administering osmotic agents such as mannitol (Osmirol) and hypertonic saline for a patient with cerebral edema, which of the following laboratory values must be monitored to determine when the therapy should be adjusted or discontinued?

A. Serum blood urea nitrogen and creatinine
B. Serum sodium and serum osmolality
C. Complete blood count and serum osmolality
D. Urine sodium and urine osmolality

Question 14
Which of the following scales is used to quantify the severity of an acute ischemic stroke?

A. Cincinnati stroke scale
B. Los Angeles stroke scale
C. NIH stroke scale
D. Ranchos los Amigos scale

Question 15
The CNS assesses a patient with a large left middle cerebral artery stroke, and notices that the patient’s family is approaching the patient from the right side of the bed. The best instructions to give the family include to approach the patient from her:

A. Left side because the stroke is causing her to neglect the right side
B. Right side because the stroke is causing her to neglect the left side
C. Right side because the stroke is causing hearing loss on the left side
D. Left side because the stroke is causing hearing loss on the right side

Question 16
Nurses are frustrated that they have not seen improvement in a patient’s neurological deficits after administration of IV rt-PA. One nurse asks if the therapy is worth the risk of bleeding. The best action for the CNS is to:

A. Review the original NINDS study of IV rt-PA in stroke, which suggest that final outcome be assessed at 90 days
B. Collaborate with one of the neurologists to invite a patient who experienced a good outcome back to meet the ICU staff
C. Collaborate with staff at a neighboring academic medical center to recount their experience with a higher volume of patients
D. Provide an educational module on the results of the NINDS IV rt-PA trial in stroke

Question 17
The CNS is responsible for tracking functional outcomes of patients discharged from a specialized stroke unit. Which of the following scales would be the best tool to track the functional outcome of these patients at discharge and at 3 months?

A. Glasgow Outcome Scale
B. Modified Rankin Scale
C. Sickness Impact Profile
D. Functional Living Index
Question 18
A patient has bifrontal contusions after an assault. His ICP, measured by an intraventricular catheter, has increased to 42 mmHg. His cerebral perfusion pressure (CPP) is now 48 mmHg and his right pupil is large and fixed. Using the Guidelines for the Management of Severe Traumatic Brain Injury as a reference, which of the following action(s) would you expect to be performed?

A. Hyperventilation to PaCO$_2$ of 30–35 mmHg, administration of mannitol (Osmitrol) bolus 1 g/kg
B. Hyperventilation to PaCO$_2$ of 25–30 mmHg, mannitol bolus administration of 1 g/kg
C. Hyperventilation to PaCO$_2$ of 30–35 mmHg, induction of a barbiturate coma
D. Hyperventilation to PaCO$_2$ of 25–30 mmHg, induction of a barbiturate coma

Question 19
When asked to explain uncal herniation to a staff member, the CNS gives the following explanation: Uncal herniation occurs when a supratentorial mass lesion expands:

A. Pushing the tip of the temporal lobe against the third cranial nerve, causing a fixed and dilated pupil
B. Pushing the tip of the parietal lobe against the third cranial nerve, causing a fixed and dilated pupil
C. Pushing the cerebellum down through the foramen magnum, causing bilateral fixed and dilated pupils
D. Pushing the tip of the parietal lobe against the second cranial nerve, causing unilateral blindness

Question 20
The CNS is debriefing with a group of nurses who have recently cared for a patient with signs and symptoms of bacterial meningitis. The CNS is most likely to emphasize which of the following as the top priority for the treatment of patients with this disease?

A. Early CT scan
B. Early antibiotics
C. Early intubation
D. Early nutrition

Question 21
The staff is caring for a patient with increased ICP after a right frontal contusion. The CNS knows systemic vasodilation resulting in increase in ICP can be caused by hypotension, hypoxia, and which of the following conditions?

A. Hypercarbia and hyperthermia
B. Hypercarbia and hypothermia
C. Hyperglycemia and hypothermia
D. Hypoglycemia and hyperthermia
Question 22
A patient diagnosed with Guillain–Barré syndrome is quadriplegic and requires endotracheal intubation and mechanical ventilation. The patient is often tearful, and the staff verbalizes concern that the patient often appears afraid and unable to activate the staff call system. The CNS would be most likely to assist the staff in choosing which of the following interventions to improve communication and sense of control with this patient?

A. A large, pressure-triggered, hand-activated call bell
B. A pressure plate call bell that can be activated by the patient turning her head slightly
C. A communication board with letters and words which she can validate with a caregiver by blinking
D. A communication board with pictures which she can validate with a caregiver by blinking

Question 23
Following a concussion during a sports event, a patient’s Glasgow Coma Scale (GCS) is 14 and CT scan negative for bleeding or other structural abnormality. The patient should be counseled on which of the following potential complications of mild traumatic brain injury?

A. Postconcussive syndrome
B. Chronic traumatic encephalopathy
C. Chronic fatigue syndrome
D. Central pontine myelinolysis

Question 24
A patient is observed to be having a generalized tonic clonic seizure for 8 minutes. The CNS expects which diagnosis to be made, and which class of medications to be ordered initially?

A. Status epilepticus; antiepileptic medications
B. Status epilepticus; benzodiazepines
C. Epilepsy; antiepileptic medications
D. Epilepsy; benzodiazepines

Question 25
Nursing staff consults the CNS regarding a lack of consistency and communication between providers and nursing staff on the level of spinal precautions required for patients with traumatic spinal cord or vertebral injury and elective spinal surgical procedures. In order to standardize this practice and improve communication, the CNS might chooses to work with the nursing staff to develop a(n):

A. Web-based education program on spinal precautions for the nursing staff
B. Standardized order set to delineate levels of spinal precautions
C. Evidence-based order set for spinal precautions
D. Survey tool regarding spinal precautions practices
Question 1
A young adult with stage 4 bone cancer became unresponsive last night. There is no advance directive or DNR order in the patient’s chart. His sister tells the family that her brother recently told her he was tired of treatments and just wanted to be out of pain. However, the rest of the family is adamant that aggressive care be continued “to give him every chance.” The CNS is consulted to assist with the situation. What should be the CNS’s next step?

A. Ask the physician to write a “do not attempt resuscitation” order in the chart  
B. Convene the family to discuss what the patient would want and determine the best course of action  
C. Contact the hospital chaplain to provide spiritual guidance for this family  
D. Explain to the family that if the patient has a cardiac or respiratory arrest, the staff will be obligated to provide CPR and the patient will suffer

Question 2
A patient with Down syndrome is diagnosed with early-onset Alzheimer’s disease. An important intervention to initiate at this time is to:

A. Inform the family that the patient should have a feeding tube placed now before feeding problems become an issue  
B. Ensure the patient and family that decisions about end-of-life care preferences do not have to be made until the disease progresses  
C. Educate the patient and caregivers on the course of the disease and expected outcomes using developmentally appropriate language  
D. Gather the interdisciplinary team to formulate a care plan so all providers are on the same page

Question 3
Patient attitudes surrounding acute and chronic pain control are impacted by:

A. The amount of opioids they are given and how fast they get them  
B. Their perception of the staff’s competence in assessing pain  
C. The reaction of the staff when the patient asks for stronger pain medications  
D. Their perception of how well the staff communicates caring about how the patient feels

Question 4
A patient with end-stage liver disease becomes unconscious and unresponsive to painful stimuli. There is no advance directive nor DNR order in the chart. The physician prepares to intubate the patient for airway protection when the family decides to withhold this treatment. The bedside nurse asks the CNS to tell the family they cannot make this decision. The CNS should:

A. Clarify the bedside nurse’s understanding of legal issues surrounding patient proxy  
B. Explain to the family that because the patient is unconscious, only the physician can make the decision to intubate or not  
C. Call an Ethics Committee consult to review the case  
D. Tell the family that withholding intubation is not in the best interest of the patient
Question 5
Caring for complex patients with significant physical and emotional needs has placed huge burdens on nursing staff over the last 3 months. Ethics consults have been called on half the patients in the last month alone, and several nurses have started to refuse patient assignments involving patients they perceive as receiving “futile” care. The CNS’s next step is to:

A. Provide education on moral reasoning and patient advocacy  
B. Survey the staff to identify triggers and sources of moral distress  
C. Review the literature to identify best practices in improving moral distress  
D. Facilitate interdisciplinary communication by developing formal mechanisms for conflict resolution

Question 6
An example of individualizing patient care would be:

A. Suctioning all intubated patients every 2 hours  
B. Providing stool softeners for thrombocytopenic patients who have hemorrhoids  
C. Instituting bleeding precautions for patients with very low platelet counts  
D. Documenting the initial assessment on all patients within 2 hours of admission

Question 7
Evidence-based interventions to create a healing environment in acute care settings include:

A. Instituting a 1-hour period of “quiet time” once a day  
B. Making a point to interact with the patient and family frequently  
C. Adhering to a strict visiting policy so the patients can rest  
D. Painting red, orange, or yellow accent walls in the patient rooms

Question 8
The Nurse Manager consults the CNS about the increase in the number of incidents of agitation in patients diagnosed with delirium. The cost of “observers” to watch these patients is high, and the Nurse Manager asks the CNS for recommendations about how to deal with this situation. What should be the CNS’s next step?

A. Identify the scope of the problem by collecting retrospective data on characteristics of patients diagnosed with delirium over a 3-month period  
B. Prospectively observe patients needing continuous observation over the next 3 months  
C. Measure agitation levels of all patients with a delirium diagnosis the first day of admission to the unit  
D. Conduct a randomized study on the effect of observers on delirious patients

Question 9
A patient is agitated and picking at his intravenous line. A sitter has been assigned to watch the patient. The wife is upset and tells the nurse that “He is usually so soft-spoken and now he is demanding and loud. What is happening?!?” Which interventions would be appropriate to keep the patient from harm?

A. Ask the wife what type of activities he likes and have the sitter engage him in that activity when she’s not there  
B. Bring a CD player into the room and let him pick out his favorite music  
C. Explain to the wife that he is very ill and just needs to rest  
D. Have the bedside nurse put restraints on him to discourage any violent activity
Question 10
An elderly patient is admitted with a diagnosis of sepsis. The patient’s husband insists on staying at his wife’s bedside, despite the fact that visiting hours are restricted to four times a day. The CNS demonstrates caring by:

A. Explaining that the ICU visiting policy is enforced to allow patients to rest
B. Explaining that the visiting policy is based on research showing that visitors increase patient stress
C. Allowing the husband to stay as long as he likes, as long as he takes time to eat and take breaks
D. Extend the visiting time somewhat to accommodate the husband’s request

Question 11
To ensure best practices for the care of patients with oncologic emergencies, the CNS should:

A. Convene a multidisciplinary team to develop documentation tools and practice standards
B. Consult with the family to arrange patient transport for services provided outside of the hospital
C. Develop and implement unit-based, evidence-based practice standards
D. Coach the nursing staff to recognize patients at risk and develop protocols of care

Question 12
Which intervention led by the CNS would most positively influence patient care workflows and processes?

A. Initiating brainstorming sessions during staff meetings
B. Empowering staff to lead innovation efforts
C. Auditing compliance with the new practice change after implementation
D. Asking for feedback on changes in practice from the charge nurse before introducing to the staff

Question 13
The CNS is asked to lead an interprofessional team to monitor and evaluate complications of immobility in vulnerable patient populations. Which of the following activities would be the best way to persuade staff that a change in practice is needed?

A. Audit unit documentation of patient and family education regarding the importance of activity
B. Network with other CNSs in the community and inform staff of how their protocol compares with other hospitals
C. Monitor outcomes of immobility in conjunction with the Quality Department and share results with staff
D. Compare unit protocol with latest evidence-based practice guidelines and post in staff lounge

Question 14
The nurse manager alerts the CNS that medication administration errors in the unit increased over the last month. The nurse manager gives this analysis to the CNS because the CNS:

A. Has the time to review the medication administration records to find the nurses responsible for the errors
B. Has the skills to conduct a root cause analysis and develop a plan to improve the system
C. Can teach by example by modeling the correct process for medication administration
D. Can use these data to plan educational programs related to the specific type of medication errors identified
**Question 15**
The CNS searches the literature to inform a practice change related to restraint usage. Which of the following types of literature would represent the *highest level of evidence*?

A. Original research study  
B. State-of-the-science article  
C. Randomized controlled trial  
D. Meta-analysis

**Question 16**
Which of the following interventions would be *most effective* in demonstrating the CNS’s influence to make system change?

A. Providing direct care to patients at risk for complications of immobility  
B. Convincing the patient at risk to participate in out-of-bed activities  
C. Coaching unit nursing staff in the selection of mobility products  
D. Presenting cost information on the effects of immobility to administrators

**Question 17**
The CNS is asked to be a member of the Design Team for a new hospital addition. *To promote a healing environment*, the CNS recommends:

A. Keeping the artwork in the halls minimal to decrease stimulation  
B. Adding nature-inspired murals directly across from the patient beds  
C. Building open-concept wards to increase patient socialization  
D. Putting hardwood floors throughout the wings to improve the aesthetic

**Question 18**
Which of the following interventions would be *most effective* in encouraging adoption of a new type of care delivery method in the unit?

A. Posting a run chart of patient satisfaction scores before and after the innovation  
B. Developing and distributing educational materials at staff meetings  
C. Identifying the unit opinion leaders and recruiting them as change champions  
D. Auditing compliance and providing regular feedback to the staff

**Question 19**
A CNS is explaining to a CNS student how to access EBP guidelines using a mobile application when he notices a group of medical students waiting for rounds to begin. The CNS invites the medical students to join the discussion and shares his knowledge of EBP apps with the whole group. The CNS’s actions exemplify the core competency of:

A. Collaboration  
B. Consultation  
C. Systems thinking  
D. Caring practices
Question 20
Which of the following methods would be most effective in assisting the CNS to demonstrate the positive impact of strategies she put in place to decrease unplanned extubations?

A. Outcomes data  
B. Productivity log  
C. Self-evaluation  
D. Pretest-posttest approach

Question 21
A Japanese patient is admitted post-op. The patient speaks only a few words of English. Her son has been acting as translator during evening visiting hours, but can’t come during the day because of work. Which intervention would do the most to convey respect to the patient and her culture?

A. Tape a Japanese flag to the foot of her bed  
B. Work with the son to create a phonetically spelled communication sheet of key words for the staff  
C. Assign an Asian-American nurse to care for the patient each shift  
D. Provide an CD player and let the patient choose music from the unit’s comprehensive music library

Question 22
A staff nurse is caring for a patient diagnosed with hypertension and type 2 diabetes mellitus. The patient describes herself as a “deeply spiritual being” and “an old soul.” The CNS notices that the patient makes a point to spend time in the hospital Zen garden every day. When mutually developing the discharge plan with the patient, which intervention would most likely increase the likelihood of patient compliance with the medical regimen?

A. Encourage the patient to schedule a period of “quiet time” engaged in meditation, prayer, or relaxation exercises every day  
B. Explain the purpose and side effects of each medication and have the patient “teach back”  
C. Schedule the patient for a hypertension support group session in the Zen garden  
D. Provide patient with an educational booklet on living with hypertension and diabetes

Question 23
The CNS has noticed an increase in the number of immigrant Vietnamese patients in the hospital. To ensure that the nurses can meet the needs of these patients, the CNS:

A. Develops an annual competency related to the care of Vietnamese patients  
B. Makes sure that patient education materials are produced in a large print version  
C. Revises hospital orientation to include content about Vietnamese culture and health practices  
D. Introduces a transcultural theory of patient care to all nursing staff

Question 24
Patients repeatedly complain about the noise level in the unit. The CNS begins to address this concern by:

A. Collecting data on noise levels in different areas of the unit and at different times of the day  
B. Forming an interdisciplinary team to develop a policy on noise standards  
C. Asking the nurse manager to fund the purchase of therapeutic sound machines for the patient rooms  
D. Conducting a survey of staff perceptions of noise in the unit
Question 25
To promote sustainability of a recent practice change, the CNS:

A. Provides group and 1:1 education on a quarterly basis
B. Posts a run-chart of the unit’s performance on nursing care-related patient satisfaction scores
C. Institutes a quarterly Staff Nurse Award for compliance
D. Audits charts of one or two nursing staff a day to evaluate compliance

Question 26
The CNS wants to implement a new protocol for routine oral care to prevent ventilator-associated pneumonia (VAP). Which of the following will be most effective in demonstrating the effect of the practice change on patient outcomes?

A. Create a chart that compares recommendations from multiple clinical practice guidelines
B. Educate the staff on the importance of oral care for infection control
C. Collaborate with Risk Management to compare cost of oral care kits with the cost of treating VAP
D. Obtain unit-specific baseline data on VAP rates

Question 27
After implementation of a successful innovative and multifaceted intervention to increase patient satisfaction with nurse communication, the CNS wants to share the outcomes. The most effective way for the CNS to disseminate this project is to:

A. Submit an abstract to present the project at a national advanced practice conference
B. Write an article outlining the process and outcomes for a major nursing research journal
C. Present a poster during the institution’s annual Nurses Week celebration
D. Ensure that the protocol is taught to all nurses during hospital orientation

Question 28
A significant advantage of using rapid cycle tests of change for practice innovations is the ability to:

A. Show the Nurse Manager that the unit can work as a team
B. “Field test” the innovation to increase the likelihood of success
C. Ensure the acceptance of the innovation in unit practice
D. Be able to dismiss innovations that do not work after the end of one cycle

Question 29
The CNS is teaching nursing staff to use the Mini Mental State Exam (MMSE). The CNS explains that the purpose of this assessment tool is which of the following?

A. Quickly evaluate the ability of a patient to understand patient teaching materials
B. Document the patient’s ability to follow commands and localize pain
C. Evaluate progression of mental status changes to direct pharmacologic therapy
D. Evaluate the patient’s level of orientation, cognitive function, calculating skills, and reasoning ability
Question 30
When facilitating educational sessions with a patient, the CNS should:

A. Teach the patient what he needs to *know*, rather than what he needs to *do*
B. Tell the patient to read the patient information packet first and then meet to answer the patient’s questions
C. Employ strategies that promote behavior change, including motivational approaches
D. Use a structured teaching plan for all patients so that information is not missed

Question 31
Patient education includes focused content about the basic function of the body systems affected by the patient’s specific disease process. The *purpose* of teaching this content is to help the patient:

A. Recognize signs and symptoms that would require the patient to notify a healthcare provider
B. Relay this information to their family members
C. Understand the scientific terminology used by their healthcare providers
D. Use preventative services available in their community

Question 32
Which of the following statements would indicate to the CNS that education regarding oral care and infections is needed by the staff?

A. “On average, implementing an oral care protocol can decrease the incidence of VAP by almost half”
B. “Routine oral care should be started within 1 day of admission to the unit”
C. “The best oral care product for removing plaque and debris is a foam sponge”
D. “Intubated patients are vulnerable to opportunistic oral and respiratory infections”

Question 33
A CNS is working for the local university as adjunct clinical faculty. One of his nursing students has not been able to complete all of the patient care tasks for her patient before the student’s shift is over. How should the CNS instructor handle this situation?

A. Tell the nursing student that she needs to complete the patient’s care after postconference
B. Complete the tasks yourself, so the nurse assigned to the patient won’t be angry with the student
C. Have the student delegate the uncompleted tasks to the nursing assistant
D. Turn over the uncompleted tasks to the nurse assigned to the patient
ACCNS-AG Review Course: Psychological/Behavioral/Cognitive
Kathryn Johnson, PMHNP-BC; PMHCNS-BC

Question 1
What is the most likely explanation of “panic attacks occurring 2–3 times daily” in a patient who has been taking alprazolam (Xanax) 0.5 mg po q6–8 hours prn for 2 weeks?

A. Tolerance to the medication
B. Drug-seeking behavior
C. Missed diagnosis of bipolar disorder
D. Inadequate dosing frequency

Question 2
An elderly female has been prescribed trazodone (Desyrel) 50 mg po nightly prn for initial and middle-phase insomnia. Which of the following should be considered regarding this patient?

A. Orthostasis is a side effect; she is at increased risk to fall
B. This medication commonly causes exacerbation of depression in the elderly
C. This medication should be taken on an empty stomach
D. This medication causes somnolence within 15 minutes

Question 3
An elderly, widowed male presents for a routine follow-up appointment for arthritis. Despite telling you he is "fine," you notice he seems to be losing weight, is slightly disheveled, and is quieter than usual. Which of the following is true about suicide and the elderly?

A. Suicide rates are low among younger age groups
B. African American males are more likely than white males to commit suicide
C. Widowed females are more likely than widowed males to commit suicide
D. Very elderly white males have the highest suicide rate among all age populations

Question 4
A patient with a history of schizophrenia is quite agitated and seems to be hearing voices one day post-op. The patient has been placed in two-point restraints and is now trying to kick at staff when they approach. Which of the following principles is evidence-based and should guide interventions for an agitated person?

A. Restraining agitated patients is akin to swaddling and has been shown to assist an agitated person in calming down
B. Nonverbal communication is more effective than verbal communication when a person has schizophrenia and is psychotic
C. Sitting at eye level and offering reassurance of safety helps a person calm down
D. Decreasing stimuli by methods such as minimizing time spent in the room is paramount to this person being able to calm down
**Question 5**
A female patient has been suffering with “stress and severe insomnia” for several months. She falls asleep after an hour but wakes up within several hours, then has difficulty falling back to sleep. For the past month, she has been drinking several glasses of wine each evening “to decompress and fall asleep.” Which of the following is true about this pattern of alcohol use?

A. A pattern of nightly drinking represents alcoholism
B. Drinking several drinks each evening results in an increase in glutamate within 6–8 hours after use
C. Drinking small amounts of alcohol close to bedtime increases stage 1 and REM sleep
D. A daily pattern of alcohol use is a risk factor for depression

**Question 6**
A patient with Lewy body dementia has long periods of unresponsiveness and staring into space, tremor, and visual hallucinations. Which of the following would be contraindicated in this patient?

A. Lorazepam (Ativan)
B. Donepezil (Aricept)
C. Venlafaxine (Effexor)
D. Haloperidol (Haldol)

**Question 7**
A middle-aged, divorced, self-employed carpenter is admitted after experiencing his second myocardial infarction. He is now facing the prospect that he will no longer be able to work at his physically challenging job. Which of the following interventions addresses his developmental issues?

A. Teaching relaxation techniques and guided imagery
B. Helping to explore and discuss his fears about his future
C. Giving accurate information about his condition so that he can grieve the loss of his work life
D. Helping him explore other ways in which he can use his knowledge of carpentry

**Question 8**
A college student is admitted with a severe asthma attack that was unresponsive to albuterol as a rescue inhaler, along with her usual daily dose of fluticasone inhaler. She continues to smoke 1/2 pack of cigarettes/day, despite this being her second hospitalization for asthma. She began smoking because her roommate and her boyfriend both are smokers. Other health history includes social anxiety treated with counseling in the past. Part of your treatment plan is to address smoking cessation. Your first step in this intervention should be to:

A. Ask if she understands how smoking impacts her asthma and if she is willing to stop or cut back
B. Show her graphic photographs about how smoking affects lung and airway function
C. Suggest she go on bupropion (Wellbutrin) for smoking cessation
D. Suggest she resume counseling to address her social anxiety, which may allow her to quit smoking
Question 9
Which of the following is true regarding patients with depression who present to primary care?

A. Patients who talk about suicide or other self-harm behaviors are at low risk to commit such behaviors
B. Patients who present with somatic symptoms will answer questions about depressive symptoms if asked
C. Using a depression screening tool provides an easy way to make determinations about treatment
D. Patients who screen positive for depression should be referred to a psychiatrist

Question 10
An elderly woman is on day 5 of IV antibiotic treatment for pneumonia. She was agitated upon admission, but has appeared listless for much of the last 24 hours. The staff cannot get her to ambulate, despite recent chest films indicating the pneumonia is resolving. She has been removing her \(O_2\) cannula until today. You observe this patient sitting quietly, staring out the window. There is a paucity of spontaneous speech and she is difficult to engage. She cannot tell you what day it is. She tells you she is depressed, but will not talk further. At times she closes her eyes and appears to be sleeping, despite the fact that you are still in the room. Medications include clonazepam (Klonopin) 1.0 mg tid prn, which she has not received in 24 hours, and zolpidem (Ambien) 5 mg po qhs. The CNS’s next step should be to:

A. Screen for worsening depression
B. Screen for elder abuse
C. Screen for hypoactive delirium
D. Screen for overuse of benzodiazepines

Question 11
An elderly, widowed male was admitted for evaluation of a 20-pound weight loss. Other medical history includes macular degeneration, hypertension, dyslipidemia, arthritis, degenerative disk disease, and COPD. Labs are WNL, save for serum albumin of 2.2. He is estranged from his stepson and has no close friends or church affiliations but is on friendly terms with his neighbors. His diminishing eyesight and musculoskeletal pain have led to him being largely homebound for the past year. His primary care provider admitted him after the home health aide noted he has not been eating the food she’s prepared. Screenings for depression and dementia are negative, but he states “I have no quality of life left. I’m not suicidal, but I’m ready to die.” He is diagnosed with failure to thrive. All of the following should be considered as part of the patient’s treatment plan, except:

A. Referral to hospice
B. Referral to a SNF
C. Referral to a social worker
D. Referral to a dietician
Question 12
An elderly woman with dementia who resides with her daughter has been increasingly confused in the past 6–9 months, particularly at night. Haloperidol (Haldol) 0.5 mg q6 hr prn for agitation was recently added; daughter states “I’ve been giving her a little more at night, but it just hasn’t helped.” Daughter brought the woman to the hospital when she became listless. She is thin, frail, staring off into space, and minimally responsive. There is prominent bruising in various stages on her back and upper limbs. You inquire about the bruising and daughter responds "What are you suggesting? She’s always falling, I can't keep her from getting up at night. Nothing helps." She is diaphoretic; T is 102; BP and pulse fluctuate between normal and alarmingly high; labs show leukocytosis and elevation in CK. A diagnosis of neuroleptic malignant syndrome (NMS) is made and supportive treatment is begun. The most appropriate next step by the CNS is to:

A. Educate the family about NMS
B. Explore dementia support services to assist the daughter
C. Explore possible causes of the bruising with the daughter
D. Make a report to adult protective services

Question 13
College students who binge drink are at high risk for injury from motor vehicle accidents, having unprotected sex, fighting, and alcohol poisoning. Evidenced-based practice supports which of the following interventions?

A. Psychoeducation about “just say no”
B. Psychoeducation and motivational interviewing
C. Mandatory reporting of underage drinking
D. Mandatory referrals to substance abuse programs

Question 14
All of the following are consistent with a diagnosis of bipolar disorder, except:

A. Rapid fluctuation in mood, sleep, activity, and motivation
B. Depressed mood, hypersomnolence, hyperphagia, and low energy
C. Depressed or irritable mood, racing thoughts, insomnia, and high energy
D. Euphoric mood, increase in goal-directed activity, racing thoughts, insomnia, and high energy

Question 15
A woman is newly referred to a geriatric medicine chronic pain service. Her health issues include arthritis, chronic sciatica from a bulging L4-5 disc, mild cognitive impairment, and a recent recurrence of depression which had been stable for decades. Current medications are acetaminophen (Tylenol) 325 mg up to 6 tabs daily and hydrocodone/acetaminophen (Vicodin) 5 mg/300 mg bid prn. She reports her pain and memory issues seem to be worsening and she recently gave up her cherished apartment to live with her daughter. The treatment team is considering starting her on an antidepressant to address pain and mood. Which of the following should be avoided?

A. Amitriptyline (Elavil)
B. Desvenlafaxine (Pristiq)
C. Duloxetine (Cymbalta)
D. Venlafaxine (Effexor)
Question 1
How would the CNS ensure that measures to prevent pulmonary embolus (PE)/venous thromboembolism (VTE) are being implemented?

A. Institute a protocol to put all patients on low-molecular-weight heparin
B. Initiate a mobility program for all patients to achieve their highest level of mobility
C. Start a PE/VTE protocol that includes placing sequential compression devices on all patients
D. Teach nurses to assess patients for PE/VTE risk using an evidence-based screening tool

Question 2
A patient returning from surgery has increased oxygen demands. The CNS is consulted and finds an anxious and tachypneic patient whose SaO₂ is 82% on 6 liters nasal cannula. An ABG reveals:

pH 7.50; PaO₂ 50; PaCO₂ 30; HCO₃ 19

Based on the scenario, the CNS interprets:

A. Hypoxemic, hypercapnic respiratory failure
B. Respiratory acidosis due to anxiety
C. Respiratory alkalosis from hyperventilation
D. Metabolic acidosis as a result of hypoxia

Question 3
Which of the following criteria should not be included in a liberation protocol for mechanical ventilation?

A. Patient is hemodynamically stable
B. Fluid, electrolyte, and acid-base status are within normal limits
C. FIO₂ ≤50% and PEEP ≤5
D. Minute ventilation >20

Question 4
Which mode of ventilation can be used in a liberation protocol to enhance spontaneous ventilation and decrease the work of breathing?

A. Pressure-regulated volume control
B. Pressure support
C. Adaptive support ventilation
D. Assist control ventilation

Question 5
What is a common cause of hypoxemic-hypercapnic respiratory failure?

A. Atelectasis
B. Acute respiratory distress syndrome (ARDS)
C. Drug overdose with CNS depressants
D. Pneumonia
Question 6
The CNS would be correct in explaining to staff that a ventilation problem occurs when:

A. Decreased blood flow through the pulmonary artery
B. Impaired gas movement in and out of the lungs
C. Decreased blood flow through the pulmonary vein
D. Decreased cardiac output that reduces blood flow

Question 7
Which of the following statements about prone ventilation is true?

A. Mechanically ventilating in the prone position reduces mortality and decreases ventilator days
B. Prone ventilation may improve oxygenation in severely hypoxic patients, but it does not improve mortality
C. All patients with acute lung injury should be rotated in the prone position for 6 hours in a 24-hour period
D. There is no literature to support the use of prone ventilation in acute lung injury

Question 8
When the positive inspiratory pressure (PIP) alarms high for a patient with ARDS, what should the CNS instruct the bedside nurse to do first?

A. Suction the patient
B. Increase the FIO\textsubscript{2}
C. Check the ventilator for a disconnection or leak
D. Assess the patient for biting, increased secretions, or pneumothorax

Question 9
How should the CNS stimulate clinical inquiry when a nurse asks why saline is not routinely inserted into the endotracheal (ET) tube for suctioning?

A. Tell her there is no benefit to be gained with the instillation of saline into the ET tube
B. Explain that new guidelines no longer recommend the routine use of saline for suctioning
C. Invite her to join a journal club to discuss the latest evidence for this practice change
D. Show her where to find the latest policy revision

Question 10
A trauma victim drops his SaO\textsubscript{2} levels, becomes dyspneic and hypotensive, and has a right tracheal deviation. The CNS should instruct the nurse to:

A. Prepare for an emergent decompression of the patient’s left lung and chest tube placement
B. Help the physician prepare for intubation
C. Begin oxygenating the patient with a 100% non-rebreather mask
D. Prepare for an emergent decompression of the patient’s right lung and chest tube placement
Question 11
After several incidents involving chest tube dislodging, the CNS notices a pattern involving novice nurses. What should the CNS do first to ensure patient safety?

A. Initiate education for all graduate nurses
B. Begin a root cause analysis to investigate the problem
C. Write a new protocol for care of chest tubes
D. Begin auditing chest tube care on the unit, including site checks

Question 12
Which of the following patients is susceptible to aspiration?

A. Patients with a Glasgow coma scale of 15
B. Patients with a decreased gag reflex
C. Patients over 65 years old
D. Residents of long-term care facilities

Question 13
Which of the following interventions to decrease the incidence of ventilator-associated pneumonia (VAP) is strongly encouraged, but not supported by strong clinical evidence at this time?

A. Keep head of bed elevated 30-45 degrees
B. Do not routinely change the ventilator circuit
C. Administer oral care with chlorhexidine at least once a shift
D. Provide continuous suctioning of the subglottic area

Question 14
Which of the following medications has a black box warning and would be contraindicated as the only prescription for control of asthma symptoms?

A. Long-acting Beta-2 agonists
B. Short-acting Beta-2 agonists
C. Xanthines
D. Anticholinergics

Question 15
When educating an asthmatic patient with a history of smoking, what should be done first to help influence successful outpatient management?

A. Provide educational pamphlets about smoking cessation and medication compliance
B. Determine her readiness to learn prior to collaboration with pulmonary rehabilitation
C. Explain that medications will be affordable when she quits smoking
D. Inform her of the mortality rates of asthmatic patients who continue to smoke
Question 16
According to the World Health Organization, chronic obstructive pulmonary disease (COPD) includes conditions that obstruct air flow, such as emphysema, chronic bronchitis, and:

A. Large airway disease  
B. Small airway disease  
C. Pulmonary fibrosis  
D. Bronchiectasis

Question 17
Which pulmonary function test confirms the diagnosis of COPD?

A. Low peak expiratory flow  
B. Forced expiratory volume in 1 second (FEV\textsubscript{1})=4 liters  
C. FEV\textsubscript{1}/forced vital capacity (FVC)=0.56  
D. FEV\textsubscript{1}/FVC=0.8

Question 18
Which of the following is true and most relevant in the context of assessing risk for exacerbations in the COPD patient?

A. The best predictor of exacerbations is a history of previous treated events  
B. Patients with a high risk of exacerbations are typically in the GOLD category 1 & 2  
C. The risk of exacerbations increases if the FEV\textsubscript{1} <30%  
D. Patients who continue to smoke carry with a high risk for exacerbation

Question 19
An 82-year-old with a history of COPD presents with increased SOB. Understanding that disease processes present atypically in the elderly, the CNS should rule out which of the following differential diagnoses first?

A. Pleural effusion  
B. Myocardial infarction  
C. Pneumonia  
D. Heart failure

Question 20
Which of the following treatments is shown to decrease mortality in a patient with COPD?

A. Oxygen  
B. Glucocorticoids  
C. Smoking cessation  
D. Inhaled bronchodilators
Question 21
A patient with a long history of COPD is brought to the ED with increased SOB and fatigue. He states his quality of life is poor and he is tired of being admitted to the hospital. As the CNS, the care of the patient may be best served by recommending:

A. Palliative care consult to verify patient wishes
B. Pulmonary consult for medication adjustment
C. Hospitalist consult for admission and treatment
D. Treatment of his exacerbation in the ED and discharge to home

Question 22
When developing a practice guideline for monitoring patients after surgery, which statement is true?

A. Pulse oximetry is the most reliable tool to determine adequate oxygenation
B. Capnography is the most reliable tool to determine adequate oxygenation
C. Pulse oximetry will alert caregivers to hypoventilation before capnography
D. Capnography will alert caregivers to hypoventilation before pulse oximetry

Question 23
The CNS is consulted on an obese patient who had > 20 periods of apnea during the night. With no prior history of obstructive sleep apnea (OSA), which of the following is the best action to take? Collaborate with the physician/respiratory therapist to:

A. Set up a sleep study and monitor the patient’s end tidal CO$_2$
B. Obtain an order for a CPAP at night
C. Obtain an order for a BiPAP at night
D. Obtain a pulmonologist consult for possible sleep apnea

Question 24
Which diagnostic test is used to confirm the diagnosis of pulmonary hypertension (PH) and assess the severity of disease for a patient with no evidence of left-sided heart failure?

A. Echocardiogram
B. Ventilation perfusion scan
C. Right heart catheterization
D. Chest radiograph

Question 25
A patient with pulmonary hypertension (PH) secondary to left atrial and venous hypertension is admitted with symptoms of dyspnea and weakness. A pulmonic ejection click and systolic ejection murmur is heard over the left sternal border. Which of the following treatments would be contraindicated as initial treatment for this patient?

A. Diuretics
B. O$_2$ therapy
C. Anticoagulants
D. Prostanoids
Question 26
Which is the best treatment to reduce preload in a patient with cardiogenic pulmonary edema?

A. Loop diuretic  
B. Ace inhibitor  
C. Inotropic support  
D. Ultrafiltration

Question 27
A patient with a lower lobe resection has a pleural chest tube to suction and a +1 air leak on admission. Later, the CNS is consulted about a +6 air leak and presence of subcutaneous air. The CNS should advise the staff to:

A. Reposition and redress the chest tube  
B. Check the tube connections and prepare for tube replacement  
C. Get a chest x-ray and prepare to transfer to ICU  
D. Contact the physician and prepare patient for surgery

Question 28
After prolonged mechanical ventilation, an elderly patient became confused and belligerent. Which is the best explanation and intervention for the change in the patient’s behavior?

A. He has dementia and should be medicated with an antipsychotic for his behavior  
B. He is delirious and needs a benzodiazepine for sedation  
C. He has delirium and should be screened with an evidence-based tool, then treated for possible causes  
D. He has dementia that is exacerbated by his illness; a review of medications is indicated

Question 29
After a gastric banding surgery for morbid obesity, a patient complains of sore throat in the post anesthesia recovery unit. An hour later, the patient develops inspiratory stridor and dyspnea. The CNS alerts the anesthesiologist immediately because he understands the patient is at risk for:

A. Laryngospasm  
B. Hypoxemia  
C. Bronchospasm  
D. Aspiration

Question 30
A patient starts to choke. She can’t speak or cough and has placed both hands to her throat. Which intervention is the priority?

A. Call the respiratory therapist and physician to get a bedside bronchoscopy  
B. She is conscious; call for help and perform abdominal thrusts  
C. Call a code blue and start CPR to relieve her obstruction  
D. Encourage the patient to cough to relieve the obstruction
Question 1
The CNS is educating a patient with stress incontinence about pelvic muscle exercises (Kegels). Which of the following should be included in the teaching plan?

A. Not to perform the exercise on a regular basis during urination  
B. To tighten pelvic muscles for a rapid count of 5, 15 times lying, sitting, and standing  
C. To tighten abdominal muscles when performing pelvic muscle exercises  
D. The effect of performing the exercises should be noted within 2 weeks

Question 2
A patient with a recently placed arteriovenous fistula (AVF) in his left arm complains of discomfort in his left hand. The nurse should:

A. Assess the fistula to determine presence of a thrill and bruit  
B. Assure the patient this is a normal effect of the surgery that will resolve  
C. Assess capillary refill and peripheral pulses distal to the fistula  
D. Educate the patient that he should not wear a watch or restrictive clothing on his left arm

Question 3
An ambulatory dialysis patient is admitted via wheelchair, complaining of weakness and inability to walk. The CNS anticipates that the cause of the patient’s signs and symptoms would be related to which of the following?

A. Potassium 6.5 mEq/L  
B. Phosphorus 7.0 mg/dL  
C. Calcium 12.1 mg/dL  
D. Sodium 120 mEq/L

Question 4
A 63-year-old female experienced three UTIs in the last 6 months. The patient remarks, “I do not understand why I have had so many UTIs.” The CNS’s best response would be to tell the patient that UTIs can occur related to:

A. An alteration in the bladder wall  
B. The antibiotic prescribed was ineffective against the causative organism  
C. An alteration in vaginal pH  
D. Failing to wipe front to back after urinating or having a bowel movement
Question 5
A new nurse asks the CNS for help calculating the hourly replacement fluid for a patient on continuous renal replacement therapy, with an order for a desired net hourly fluid loss of 400 mL. The previous hour, the following data were recorded: ultrafiltration 600 mL; urinary output 75 mL; N/G drainage 100 mL; IV fluids 100 mL. What should be the amount of fluid replacement over the next hour?

A. 250 mL  
B. 275 mL  
C. 325 mL  
D. 400 mL

Question 6
During interdisciplinary rounds, the CNS questions the dietician about a patient with chronic kidney disease having been placed on a regular diet. The CNS expected the patient would be prescribed a diet:

A. Low in potassium and sodium  
B. Restricting protein to 50 g daily  
C. High in calcium and low in phosphorus  
D. Low in fat and high in carbohydrates

Question 7
The CNS is implementing an evidence-based practice change to reduce catheter-associated urinary tract infections. The staff change in practice should include:

A. Catheters inserted during a prolonged surgical procedure should be removed within 36 hours post-op  
B. Patients with catheters should have their periurethral area cleansed daily with an antiseptic solution  
C. Catheters should be replaced on a routine schedule  
D. When catheterizing a patient, the smallest size catheter should be used

Question 8
The CNS is teaching a class for patients with chronic kidney disease. Included in the teaching plan is a discussion about the placement of an arteriovenous fistula (AVF). For most patients, once an AVF is placed it is ready to be accessed:

A. In 14 days or less  
B. In 3 weeks  
C. In 6–8 weeks  
D. Once a bruit has developed

Question 9
The CNS designs a community program to educate women about pelvic inflammatory disease (PID). Important information to relay is:

A. Most cases of PID are associated with HPV  
B. Sexually active women under 25 are least likely to develop PID  
C. Women who douche may have a decreased incidence of PID  
D. Yearly chlamydia testing is advised for all sexually active women age 25 or younger
Question 10
Reviewing the plan of care for a patient receiving renal replacement therapy, the CNS questions an order for replacement of fluids with:

A. Normal saline solution (0.9% NaCl)
B. Dextrose in water (D5W)
C. Lactated Ringers solution (LR)
D. Half-strength saline solution (0.45% NaCl)

Question 11
When rounding on the unit, the CNS shares her concerns with the nurse about a trauma patient recently admitted after a motor vehicle accident because the patient has:

A. Tea-colored urine within the last 24 hours
B. 40% increase in BUN over the last 24 hours
C. 15% increase in serum creatinine level over 48 hours
D. Urinary output of 0.5 mL/kg/hr the last 5 hours

Question 12
The CNS question which of the following medications ordered for a patient with a serum creatinine level of 1.5 mg/dL?

A. Doxycycline (Vibramycine)
B. Omeprazole (Prilosec)
C. Metoprolol (Lopressor)
D. Metformin (Glucophage)

Question 13
The CNS anticipates that the initial treatment for a patient admitted with rhabdomyolysis will be:

A. Placement of a peritoneal catheter
B. Administering NS at 400 mL/hr
C. Maintaining urinary output at 200 mL/hr
D. Starting continuous venovenous hemodialysis

Question 14
Which comment by a patient being discharged after treatment for a calcium-containing calculi would indicate a need for further education?

A. “I need to limit my fluid intake after meals and drink more fluids earlier in the day”
B. “I will monitor my urine output for cloudiness and blood”
C. “I need to monitor my intake of milk and vitamin D”
D. “I need to increase fiber in my diet and drink less milk”
Question 15
The discharge medications for a patient with chronic kidney disease include sevelamer hydrochloride (Renagel) 800 mg PO TID. The CNS educates the patient that Renagel should be taken:

A. 2 hours before meals  
B. 1 hour after taking other medications  
C. With other medications  
D. With meals