

# Neuro NCLEX

## Practice Questions

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| <p>Which statement is true for a patient who has pathology in Wernicke's area of the cerebrum?</p> <p>A. Receptive speech is affected.<br/> B. The parietal lobe is involved.<br/> C. Sight processing is abnormal.<br/> D. An abnormal Romberg test is present.</p>   | <p>A<br/> The temporal, not parietal, lobe contains the Wernicke area, which is responsible for receptive speech and integration of somatic, visual, and auditory data. Sight processing occurs in the occipital lobe. The Romberg test is used to assess the position sense of the lower extremities.</p>  |
| <p>After a major head trauma, the patient's respiratory and cardiac functions are affected. Which area of the brain is damaged?</p> <p>A. Temporal lobe of the cerebrum<br/> B. Brainstem<br/> C. Cerebellum<br/> D. Spinal nerves</p>   | <p>B<br/> The brainstem includes the midbrain, pons, and medulla. The vital centers concerned with respiratory, vasomotor, and cardiac function are located in the medulla. Integration of somatic, visual, and auditory data occurs in the temporal lobe. The cerebellum coordinates voluntary movement, trunk stability, and equilibrium. Motor and spinal nerves serve particular areas of the body.</p>   |
| <p>What is the purpose of the blood-brain barrier?</p> <p>A. To protect the brain by cushioning<br/> B. To inhibit damage from external trauma<br/> C. To keep harmful agents away from brain tissue<br/> D. To provide the blood supply to brain tissue</p>   | <p>C<br/> The blood-brain barrier is a physiologic barrier between capillaries and brain tissue. The structure of the brain's capillaries is different from others, and substances that are harmful are not allowed to enter brain tissue. Lipid-soluble compounds enter the brain easily, but water-soluble and ionized drugs enter slowly. The spinal fluid and meninges help cushion the brain. The skull protects from external trauma. Blood is supplied to the brain from the internal carotid arteries and the vertebral arteries.</p> |
| <p>Drugs or diseases that impair the function of the extrapyramidal system may cause loss of</p> <p>A. sensations of pain and temperature.<br/> B. regulation of the autonomic nervous system.<br/> C. integration of somatic and special sensory inputs.<br/> D. automatic movements associated with skeletal muscle activity.</p>        | <p>D<br/> A group of descending motor tracts carries impulses from the extrapyramidal system, which includes all motor systems (except the pyramidal system) concerned with voluntary movement. It includes descending pathways originating in the brainstem, basal ganglia, and cerebellum. The motor output exits the spinal cord through the ventral roots of the spinal nerves</p>  |
| <p>An obstruction of the anterior cerebral arteries affects</p> <p>A. visual imaging.<br/> B. balance and coordination.<br/> C. judgment, insight, and reasoning.<br/> D. visual and auditory integration for language comprehension.</p>  | <p>C<br/> The anterior cerebral artery feeds the medial and anterior portions of the frontal lobes. The anterior portion of the frontal lobe controls higher-order processes such as judgment and reasoning.</p>  |
| <p>Paralysis of lateral gaze indicates a lesion of cranial nerve</p> <p>A. II.<br/> B. III.<br/> C. IV.<br/> D. VI.</p>  | <p>D<br/> Cranial nerves III (oculomotor), IV (trochlear), and VI (abducens) are responsible for eye movement. The lateral rectus eye muscle is innervated by cranial nerve VI and is the primary muscle that is responsible for lateral eye movement</p>   |
| <p>Results of stimulation of the parasympathetic nervous system are (select all that apply)</p> <p>A. constriction of the bronchi.<br/> B. dilation of skin blood vessels.<br/> C. increased secretion of insulin.<br/> D. increased blood glucose levels.<br/> E. relaxation of the urinary sphincters</p>                                | <p>A, B, C, D<br/> Parasympathetic nervous system stimulation results in constriction of the bronchi, dilation of blood vessels to the skin, increased secretion of insulin, and relaxation of the urinary sphincter. Sympathetic nervous system stimulation results in increased blood glucose levels.</p>   |
| <p>Why is it difficult to compare the assessment of muscle strength of older adults with that of younger adults?</p> <p>A. Stroke is more common in older adults.<br/> B. Nutritional status is better in young adults.<br/> C. Most young people exercise more than older people.<br/> D. Muscle bulk and strength decrease with age.</p> | <p>D<br/> Changes associated with aging include decreases in muscle strength and agility related to a decrease in muscle bulk.</p>  |

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| <p>A patient who has a neurologic disease that affects the pyramidal tract is likely to manifest which signs?</p> <p>A. Impaired muscle movement<br/> B. Decreased deep tendon reflexes<br/> C. Decreased level of consciousness<br/> D. Impaired sensation of touch, pain and temperature</p>   | <p>A</p> <p>Among the most important descending tracts are the corticobulbar and corticospinal tracts, collectively called the pyramidal tract. These tracts carry volitional (voluntary) impulses from the cortex to the cranial and peripheral nerves. Dysfunction of the pyramidal tract is likely to manifest as impaired movement. Diseases affecting the pyramidal tract do not result in changes in the level of consciousness, impaired reflexes, or decreased sensation.</p>   |
| <p>What is important when obtaining a history of a patient with a neurologic problem?</p> <p>A. Have patient agree or disagree with suggested symptoms to obtain a thorough history.<br/> B. Mode of onset and course of illness are essential aspects.<br/> C. Check out neurologic problems caused by nutrition by asking about sodium.<br/> D. Assess for dementia using the Confusion Assessment Method (CAM).</p> | <p>B</p> <p>The mode of onset and the course of the illness are especially important aspects of the history. The nature of a neurologic disease process often can be described by these facts alone. Avoid suggesting certain symptoms or using leading questions. Nutritional deficits of B vitamins are most likely to cause neurologic problems. CAM is used to assess for delirium.</p>   |
| <p>What is the most common visual field change resulting from a brain lesion?</p> <p>A. Diplopia<br/> B. Blurred vision<br/> C. Presbyopia<br/> D. Hemianopsia</p>   | <p>D</p> <p>Visual field changes resulting from brain lesions are usually diagnosed as hemianopsia (one half of the visual field) or quadrantanopsia (one fourth of the visual field) or monocular vision.</p>  |
| <p>Which statement is the proper nursing action when testing visual acuity?</p> <p>A. Record the lowest line the patient reads with 50% accuracy.<br/> B. Have the patient remove glasses before reading the Snellen test.<br/> C. Have the patient point to the readable line if the patient is aphasic.<br/> D. Have the patient tell the number of fingers held up if a Snellen test not available.</p>             | <p>A</p> <p>The Snellen chart is read from 20 feet away, and the number on the lowest line that the patient can read with 50% accuracy is recorded. If the patient wears glasses normally, he or she should wear them during the test. Acuity may not be testable by these means if the patient does not read English or is aphasic. If a Snellen test is not available, the patient is asked to read newsprint for gross assessment of acuity, and the distance from the patient to the newsprint should be recorded. Using the number of fingers held up tests only gross visual ability.</p> |
| <p>You trace the number 8 on the patient's palm, and ask the patient to identify the number. What is this diagnostic test indicating?</p> <p>A. Function of cranial nerves XI and XII<br/> B. Stereognosis<br/> C. Cortical integration in the parietal lobe<br/> D. Spinocerebellar tracts</p>  | <p>C</p> <p>Graphesthesia, the ability to feel writing on skin, is a test of cortical integration of sensory perceptions (which occurs in the parietal lobes). Cranial nerve XI (accessory) is tested by shrugging the shoulders and turning the head to the side, and cranial nerve XII (hypoglossal) is tested by protruding the tongue. Stereognosis is the ability to perceive the form and nature of objects. Spinocerebellar tracts carry information about muscle tension and body position to the cerebellum.</p>   |
| <p>When assessing a patient with a traumatic brain injury, you notice uncoordinated movement of the extremities. How would you document this?</p> <p>A. Ataxia<br/> B. Apraxia<br/> C. Anisocoria<br/> D. Anosognosia</p>  | <p>A</p> <p>Ataxia is a lack of coordination of movement, possibly caused by lesions of sensory or motor pathways, cerebellar disorders, or certain medications.</p>  |
| <p>How do you assess the accessory nerve?</p> <p>A. Assess the gag reflex by stroking the posterior pharynx.<br/> B. Ask the patient to shrug the shoulders against resistance.<br/> C. Ask the patient to push the tongue to either side against resistance.<br/> D. Have the patient say "ah" while visualizing elevation of the soft palate</p>   | <p>B</p> <p>The spinal accessory nerve is tested by asking the patient to shrug the shoulders against resistance and to turn the head to either side against resistance. The other options are used to test the glossopharyngeal and vagus nerves.</p>  |
| <p>When assessing motor function of a patient admitted with a stroke, you notice mild weakness of the arm demonstrated by downward drifting of the extremity. How would you accurately document this finding?</p>  | <p>D</p> <p>Downward drifting of the arm or pronation of the palm is identified</p>   |

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| <p>A. Athetosis<br/>B. Hypotonia<br/>C. Hemiparesis<br/>D. Pronator drift</p>  | <p>as pronator drift. Hemiparesis is weakness of one side of the body, hypotonia describes flaccid muscle tone, and athetosis is a slow, writhing, involuntary movement of the extremities</p>   |
| <p>A patient's sudden onset of hemiplegia has necessitated a computed tomography (CT) of her head. Which assessment should you complete before this diagnostic study?<br/>A. Assess the patient's immunization history.<br/>B. Screen the patient for any metal parts or a pacemaker.<br/>C. Assess the patient for allergies to shellfish, iodine, or dyes.<br/>D. Assess the patient's need for tranquilizers or antiseizure medications.</p>  | <p>C<br/>Allergies to shellfish, iodine, or dyes contraindicate the use of contrast media for CT. The patient's immunization history is not a central consideration, and the presence of metal in the body does not preclude the use of CT as a diagnostic tool. The need to assess for allergies supersedes the need for tranquilizers or antiseizure medications in most patients.</p> |
| <p>How should you most accurately assess the position sense of a patient with a recent traumatic brain injury?<br/>A. Ask the patient to close his or her eyes and slowly bring the tips of the index fingers together.<br/>B. Ask the patient to maintain balance while standing with his or her feet together and eyes closed.<br/>C. Ask the patient to close his or her eyes and identify the presence of a common object on the forearm.<br/>D. Place the two points of a calibrated compass on the tips of the fingers and toes, and ask the patient to discriminate the points.</p> | <p>B<br/>The Romberg test is an assessment of position sense in which the patient stands with the feet together and then closes his or her eyes while attempting to maintain balance. The other tests of neurologic function do not directly assess position sense.</p>  |
| <p>Why are the data regarding mobility, strength, coordination, and activity tolerance important for you to obtain?<br/>A. Many neurologic diseases affect one or more of these areas.<br/>B. Patients are less able to identify other neurologic impairments.<br/>C. These are the first functions to be affected by neurologic disease.<br/>D. Aspects of movement are the most important function of the nervous system.</p>  | <p>A<br/>Many neurologic disorders can cause problems in the patient's mobility, strength, and coordination. These problems can result in changes in the patient's usual activity and exercise patterns.</p>   |
| <p>During neurologic testing, the patient is able to perceive pain elicited by a pinprick. Based on this finding, which assessment may be omitted?<br/>A. Position sense<br/>B. Patellar reflexes<br/>C. Temperature perception<br/>D. Heel-to-shin movements</p>  | <p>C<br/>If pain sensation is intact, assessment of temperature sensation may be omitted because both sensations are carried by the same ascending pathways.</p>   |
| <p>A patient's eyes jerk while the patient looks to the left. How do you record this finding?<br/>A. Nystagmus<br/>B. Cranial nerve VI palsy<br/>C. Oculocephalia<br/>D. Ophthalmic dyskinesia</p>   | <p>A<br/>Nystagmus is fine, rapid jerking movements of the eyes.</p>   |
| <p>You are caring for a patient with peripheral neuropathy who is going to have electromyographic (EMG) studies tomorrow morning. What should you do to prepare the patient?<br/>A. Ensure the patient has an empty bladder.<br/>B. Instruct the patient that there is no risk of electric shock.<br/>C. Ensure the patient has no metallic jewelry or metal fragments.<br/>D. Instruct the patient that he or she may experience pain during the study.</p>   | <p>B<br/>Electromyography (EMG) assesses electrical activity associated with nerves and skeletal muscles. Needle electrodes are inserted to detect muscle and peripheral nerve disease. You should inform the patient that pain and discomfort are associated with insertion of needles. There is no risk of electric shock with this procedure.</p>                                     |
| <p>Which option indicates a sign of Cushing's triad, an indication of increased intracranial pressure (ICP)?<br/>A. Heart rate increases from 90 to 110 beats/minute<br/>B. Kussmaul respirations<br/>C. Temperature over 100.4° F (38° C)<br/>D. Heart rate decreases from 75 to 55 beats/minute</p>  | <p>D<br/>Cushing's triad is systolic hypertension with a widening pulse pressure, bradycardia with a full and bounding pulse, and slowed respirations. The rise in blood pressure is an attempt to maintain cerebral perfusion, and it is a neurologic emergency because decompensation is imminent. The other options are not part of Cushing's triad.</p>                              |

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| <p>The patient had an acute ischemic stroke 4 hours ago and has an elevated blood pressure. What action should you take?</p> <p>A. Document the findings because the increased pressure is needed to perfuse the brain.</p> <p>B. Administer an antihypertensive medication to prevent additional damage.</p> <p>C. Hyperventilate the patient to cause vasodilatation.</p> <p>D. Teach patient about a low sodium diet.</p> | <p>A</p> <p>After a stroke, temporary hypertension is needed to perfuse the area of swelling. No treatment is done unless the pressure is above 220/110 mm Hg in the first few hours. Aggressive lowering of blood pressure is not done, because if the pressure drops, it can prevent regional perfusion and lead to local tissue damage. Hyperventilation is done if hypercapnia is identified, but it is not prophylactic.</p>   |
| <p>Which response can be expected in a patient with low oxygen concentration and acidosis?</p> <p>A. Decreased cerebral fluid flow with decreased cerebral pressure</p> <p>B. Vasodilation with increased cerebral pressure</p> <p>C. Systemic hypotension with decreased cerebral pressure</p> <p>D. Cerebral tissue hypertrophy with increased cerebral pressure</p>   | <p>B</p> <p>Low concentration of oxygen ions and high concentration of hydrogen ions cause vasodilation, which can result in increased ICP if autoregulation has failed. The other options are not possible</p>   |
| <p>A patient being monitored has an ICP pressure of 12 mm Hg. You understand that this pressure reflects</p> <p>A. a severe decrease in cerebral perfusion pressure.</p> <p>B. an alteration in the production of cerebrospinal fluid.</p> <p>C. the loss of autoregulatory control of intracranial pressure.</p> <p>D. a normal balance between brain tissue, blood, and cerebrospinal fluid.</p>                           | <p>D</p> <p>Normal ICP ranges from 5 to 15 mm Hg. A sustained pressure above the upper limit is considered abnormal.</p>  |
| <p>Which option is the most sensitive indication of increased ICP?</p> <p>A. Papilledema</p> <p>B. Cushing's triad</p> <p>C. Projectile vomiting</p> <p>D. Change in the level of consciousness (LOC)</p>  | <p>D</p> <p>The LOC is the most sensitive and reliable indicator of the patient's neurologic status. Changes in LOC are a result of impaired cerebral brain flow. Papilledema and Cushing's triad are late signs. Projectile vomiting is not a sensitive indicator.</p>   |
| <p>What sign would make you suspect the cause of increased ICP involves the hypothalamus?</p> <p>A. Contralateral hemiparesis</p> <p>B. Ipsilateral pupil dilation</p> <p>C. Rise in temperature</p> <p>D. Decreased urine output</p>  | <p>C</p> <p>If the ICP affects the hypothalamus, there can be a change in the body temperature. Increasing ICP can cause changes in motor ability, with contralateral hemiparesis. Compression of the cranial nerve III causes dilation of the pupil on the side of the mass (ipsilateral). Decreased urine output is not specific for hypothalamic function.</p>   |
| <p>A patient with increased ICP has mannitol (Osmitol) prescribed. Which option is the best indication that the drug is achieving the desired therapeutic effects?</p> <p>A. Urine output increases from 30 mL to 50 mL/hour.</p> <p>B. Blood pressure remains less than 150/90 mm Hg.</p> <p>C. The LOC improves.</p> <p>D. No crackles are auscultated in the lung fields.</p>   | <p>C</p> <p>LOC is the most sensitive indicator of ICP. Mannitol is an osmotic diuretic that works to decrease the ICP by plasma expansion and an osmotic effect. Although the other options may indicate a therapeutic effect of a diuretic, they are not the main reason this drug is given.</p>  |
| <p>A patient with increased ICP is being monitored in the intensive care unit (ICU) with a fiberoptic catheter. Which order is a priority for you?</p> <p>A. Perform hourly neurologic checks.</p> <p>B. Take a complete set of vital signs.</p> <p>C. Administer the prescribed mannitol (Osmitol).</p> <p>D. Give an H2-receptor blocker.</p>  | <p>C</p> <p>The priority is to treat the known existing problem, and mannitol is the only thing that can do that. Because the patient is having the current pressure measured with objective numbers, treating the known problem is a priority over additional assessments. H2-blockers are given when corticosteroids are administered to help prevent gastrointestinal bleeding, but they are not a priority compared with the treatment of ICP.</p>  |
| <p>What is the standard to evaluate the degree of impaired consciousness for a patient with an acute head trauma?</p> <p>A. Best eye opening, verbal response, and motor response</p> <p>B. National Institutes of Health (NIH) Stroke Scale</p> <p>C. Romberg test</p> <p>D. Widening pulse pressure, bradycardia, and respirations</p>   | <p>A</p> <p>The Glasgow Coma Scale (GCS) is a standardized tool used to assess the degree of impaired consciousness, and it consists of three components. The NIH stroke scale is used for a suspected stroke and includes other components of cranial nerve assessment, motor testing, and sensory testing. The Romberg test measures balance and is used for suspected cerebellar dysfunction. The components in the last option are Cushing's triad and an indication of increased ICP, not LOC.</p> |

Vasogenic cerebral edema increases ICP by  
A. shifting fluid in the gray matter.

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| <p>B. altering the endothelial lining of cerebral capillaries.<br/> C. leaking molecules from the intracellular fluid to the capillaries.<br/> D. altering the osmotic gradient flow into the intravascular component.</p>   | <p>B<br/> Vasogenic cerebral edema occurs mainly in the white matter and is caused by changes in the endothelial lining of cerebral capillaries.</p>   |
| <p>You plan care for the patient with increased ICP with the knowledge that the best way to position the patient is to</p> <p>A. keep the head of the bed flat.<br/> B. elevate the head of the bed to 30 degrees.<br/> C. maintain patient on the left side with the head supported on a pillow.<br/> D. use a continuous-rotation bed to continuously change patient position.</p>   | <p>B<br/> You should maintain the patient with increased ICP in the head-up position. Elevation of the head of the bed to 30 degrees enhances respiratory exchange and aids in decreasing cerebral edema. You should position the patient to prevent extreme neck flexion, which can cause venous obstruction and contribute to elevated ICP. Elevation of the head of the bed reduces sagittal sinus pressure, promotes drainage from the head through the valveless venous system in the jugular veins, and decreases the vascular congestion that can produce cerebral edema. However, raising the head of the bed above 30 degrees may decrease the cerebral perfusion pressure (CPP) by lowering systemic blood pressure. Careful evaluation of the effects of elevation of the head of the bed on the ICP and the CPP is required.</p> |
| <p>Which nursing action should be implemented in the care of a patient who is experiencing increased ICP?</p> <p>A. Monitor fluid and electrolyte status astutely.<br/> B. Position the patient in a high-Fowler's position.<br/> C. Administer vasoconstrictors to maintain cerebral perfusion.<br/> D. Maintain physical restraints to prevent episodes of agitation.</p>  | <p>A<br/> Fluid and electrolyte disturbances can have an adverse effect on ICP and must be vigilantly monitored. The head of the patient's bed should be kept at 30 degrees in most circumstances, and physical restraints are not applied unless absolutely necessary. Vasoconstrictors are not typically administered in the treatment of ICP.</p>   |
| <p>Which option is most indicative of a skull fracture after blunt head trauma?</p> <p>A. Facial edema<br/> B. Epitasis<br/> C. Otorrhea positive for glucose<br/> D. Laceration oozing blood</p>  | <p>C<br/> An indication of a basal fracture is cerebrospinal fluid (CSF) leakage from the ear, which confirms that the fracture has traversed the dura. Periorbital ecchymosis can indicate a skull fracture, but generalized facial edema does not. The head is vascular, and it is not unusual to have a nosebleed; a positive ring sign (halo sign) indicates a skull fracture. A superficial laceration does not indicate a skull fracture.</p>  |
| <p>An elderly patient fell at home. Which information from the patient's history makes this patient at high risk for an intracerebral bleed?</p> <p>A. History of a heart condition<br/> B. Taking warfarin (Coumadin)<br/> C. Has lost consciousness for 5 seconds<br/> D. History of migraine headaches</p>  | <p>B<br/> Anticoagulant use is associated with increased hemorrhage and more severe head injury. A heart condition may have caused the syncope that caused the fall, but it was not solely responsible for increased bleeding. Concussions are usually minor injuries that resolve, and the typical signs include a brief disruption in level of consciousness (LOC). If the loss of consciousness is less than 5 minutes, patients are usually discharged. Headache by itself does not indicate a risk for intracerebral bleeding.</p>  |
| <p>The patient reports falling when he his foot got "stuck" on a crack in the sidewalk, hitting his head when he fell, and "passing out". The paramedics found the patient walking at the scene and talking before transporting the patient to the hospital. In the emergency department, the patient starts to lose consciousness. This is a classic scenario for which complication?</p> <p>A. Epidural hematoma<br/> B. Subdural hematoma<br/> C. Subarachnoid bleed<br/> D. Diffuse axial inju</p> | <p>A<br/> Epidural hematoma often results from a linear fracture crossing a major artery in the dura. The classic sign is an initial period of unconsciousness at the scene and a brief lucid interval followed by a decrease in LOC. A subdural hematoma often results from injury to the brain and veins and develops more slowly. The classic sign or symptom of subarachnoid hemorrhage is a patient describing "the worst headache of my life." Diffuse axonal injury is widespread axonal damage occurring after a traumatic brain injury.</p>   |
| <p>The patient has rhinorrhea after a head injury. What action should you take?</p> <p>A. Pack the nares with sterile gauze.<br/> B. A loose collection pad may be placed under the nose.<br/> C. Suction the drainage with an inline suction catheter.<br/> D. Obtain a sample for culture.</p>   | <p>B<br/> A loose collection pad may be placed under the nose. Do not place a dressing in the nasal cavity, and nothing should be placed inside the nostril. There is no need to culture the drainage. The concern is whether it is spinal fluid, which is determined by a test for glucose or the halo or ring sign.</p>  |

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| <p>The patient had a blunt head injury. What is most important for you to do before the patient's discharge?</p> <p>A. Have the patient sign the discharge papers.<br/>         B. Teach the patient how to perform the Glasgow Coma Scale (GCS).<br/>         C. Tell the patient to return if he has a headache.<br/>         D. Ensure there is a responsible adult to check on the patient</p>   | <p>the discharged patient must have a responsible adult who can stay with or check on the patient. The patient may understand the instructions but without an objective observer, he or she would not be aware whether some of the key symptoms were occurring. A patient would not know how to do the GCS if impaired or confused. A headache is not a concern, but a worsening headache unrelieved by over-the-counter medications needs to be checked.</p>  |
| <p>You are alerted to a possible acute subdural hematoma in the patient who</p> <p>A. has a linear skull fracture crossing a major artery.<br/>         B. has focal symptoms of brain damage with no recollection of a head injury.<br/>         C. develops decreasing LOC and a headache within 48 hours of a head injury.<br/>         D. has an immediate loss of consciousness with a brief lucid interval followed by decreasing LOC.</p> | <p>An acute subdural hematoma manifests within 24 to 48 hours of the injury. The signs and symptoms are similar to those associated with brain tissue compression by increased intracranial pressure (ICP) and include decreasing LOC and headache.</p>  |
| <p>During admission of a patient with a severe head injury to the emergency department, you place the highest priority on assessment of</p> <p>A. patency of airway.<br/>         B. presence of a neck injury.<br/>         C. neurologic status with the Glasgow Coma Scale.<br/>         D. cerebrospinal fluid leakage from the ears or nose.</p>  | <p>A<br/>         An initial priority in the emergency management of a patient with a severe head injury is for you to ensure that the patient has a patent airway.</p>  |
| <p>A patient with a suspected closed head injury has bloody nasal drainage. You suspect that this patient has a cerebrospinal fluid (CSF) leak when observing which of the following?</p> <p>A. A halo sign on the nasal drip pad<br/>         B. Decreased blood pressure and urinary output<br/>         C. A positive reading for glucose on a Test-tape strip<br/>         D. Clear nasal drainage along with the bloody discharge</p>       | <p>A<br/>         When drainage containing CSF and blood is allowed to drip onto a white pad, the blood coalesces into the center within a few minutes, and a yellowish ring of CSF encircles the blood, giving a halo effect. The presence of glucose is unreliable for determining the presence of CSF because blood also contains glucose.</p>  |
| <p>You are caring for a patient admitted with a subdural hematoma after a motor vehicle accident. Which change in vital signs would you interpret as a manifestation of increased intracranial pressure?</p> <p>A. Tachypnea<br/>         B. Bradycardia<br/>         C. Hypotension<br/>         D. Narrowing pulse pressure</p>  | <p>B<br/>         Changes in vital signs indicative of increased ICP are known as Cushing's triad, which consists of increasing systolic pressure with a widening pulse pressure, bradycardia with a full and bounding pulse, and irregular respirations.</p>  |
| <p>You are providing care for a patient who has been admitted to the hospital with a head injury who requires regular neurologic vital signs. Which assessments are components of the patient's score on the Glasgow Coma Scale (select all that apply)?</p> <p>A. Eye opening<br/>         B. Abstract reasoning<br/>         C. Best verbal response<br/>         D. Best motor response<br/>         E. Cranial nerve function</p>            | <p>A,C,D<br/>         The three dimensions of the Glasgow Coma Scale are eye opening, best verbal response, and best motor response.</p>   |
| <p>The patient is diagnosed with a brain tumor. Which option is the correct understanding of the preferred treatment?</p> <p>A. Surgical removal is preferred, even if the tumor is not malignant.<br/>         B. Chemotherapy is a common and effective treatment.<br/>         C. Stereotactic radiosurgery is the preferred treatment.<br/>         D. A large dose of intravenous steroid therapy is preferred.</p>                         | <p>A<br/>         Surgical removal is the preferred treatment. It can reduce tumor mass (decreasing intracranial pressure [ICP]), provides relief of symptoms, and extend survival time. Even a benign mass has a malignant effect by taking up space. Traditional chemotherapy effectiveness is limited because of the blood-brain barrier, tumor cell heterogeneity, and tumor cell drug resistance. Stereotactic radiosurgery delivers a high, concentrated dose of radiation precisely directed and is used when conventional surgery has failed or is not an option. Corticosteroids are not an integral part of therapy, but are used to control complications of radiation therapy.</p> |
| <p>A patient with a glioma is receiving temozolomide (Temodar). Prior to administration of this drug which laboratory value should you</p>   |  |

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| <p>assess because of a common side effect of this drug?</p> <p>A. Potassium<br/>B. ALT and AST<br/>C. BUN and creatinine<br/>D. Platelets</p>  | <p>D<br/>Temodar causes myelosuppression. Before giving a dose, the absolute neutrophil count should be at least 1500/<math>\mu</math>L and the platelet count should be at least 100,000/<math>\mu</math>L. That is more important than noting the potassium level, liver enzymes, or laboratory results related to kidney function.</p>  |
| <p>You are answering questions at a class on brain tumors for nursing students. Which information related to brain tumors should you include in this class?</p> <p>A. Brain tumors are not removed unless they cause headaches or seizures.<br/>B. Seizures are an uncommon symptom unless there is metastasis.<br/>C. The most common type of brain tumor is from metastasis of cancer outside of the brain.<br/>D. Brain tumors commonly metastasize to the lungs because of high vascularity.</p>   | <p>C<br/>Metastatic brain tumors from a malignant neoplasm elsewhere in the body are the most common type of brain tumors. All brain tumors eventually cause death from increasing tumor volume that leads to increased ICP, and all tumors should be removed. Seizures are common in patients with gliomas and brain metastases. Brain tumors rarely metastasize outside the CNS because they are contained by structural (meninges) and physiologic (blood-brain) barriers.</p>  |
| <p>You are obtaining a history and physical assessment for a patient with a suspected brain tumor. Which option would be a correct interpretation of findings?</p> <p>A. Balance issues indicate a tumor related in the occipital lobe.<br/>B. Personality changes can be caused by a tumor in the frontal lobe.<br/>C. Impulsivity is related to a tumor in the temporal lobe.<br/>D. Vision is affected by a tumor in the parietal lobe.</p>   | <p>B<br/>A tumor of the frontal lobe can cause behavioral and personality changes. Balance is related to the parietal lobe or cerebellum. Memory loss and impulsivity are related to alterations in the frontal lobe. Vision is affected by the occipital lobe, and parietal lobe function affects movement.</p>   |
| <p>A patient is suspected of having a cranial tumor. The signs and symptoms include memory deficits, visual disturbances, weakness of right upper and lower extremities, and personality changes. You recognize that the tumor is most likely located in which lobe?</p> <p>A. Frontal lobe<br/>B. Parietal lobe<br/>C. Occipital lobe<br/>D. Temporal lobe</p>  | <p>A<br/>A frontal lobe tumor may result in hemiplegia, seizures, memory deficit, personality and judgment changes, and visual disturbances.</p>   |
| <p>Nursing management of a patient with a brain tumor includes (select all that apply)</p> <p>A. discussing with the patient methods to control inappropriate behavior.<br/>B. using diversion techniques to keep the patient stimulated and motivated.<br/>C. assisting and supporting the family in understanding changes in behavior.<br/>D. limiting self-care activities until the patient has regained maximum physical functioning.<br/>E. planning for seizure precautions and teaching the patient and caregiver about antiseizure drugs.</p> | <p>C,E<br/>Nursing interventions should be based on a realistic appraisal of the patient's condition and prognosis after cranial surgery. You should provide support and education to the caregiver and family related to the patient's behavior changes. You should be prepared to manage seizures and teach the caregiver and family about antiseizure medications and how to manage a seizure. The overall goal is to foster patient independence for as long as possible and to the highest degree possible. You should decrease stimuli in the patient's environment to prevent increases in ICP.</p> |
| <p>You are caring for a patient admitted for evaluation and surgical removal of a brain tumor. You plan interventions for this patient based on knowledge that brain tumors can lead to which complications (select all that apply)?</p> <p>A. Vision loss<br/>B. Cerebral edema<br/>C. Pituitary dysfunction<br/>D. Parathyroid dysfunction<br/>E. Focal neurologic deficits</p>  | <p>A,B,C,E<br/>Depending on the location, brain tumors can have a wide variety of clinical manifestations, including vision loss and focal neurologic deficits. Tumors that put pressure on the pituitary can lead to dysfunction of the gland. As the tumor grows, clinical manifestations of increased ICP and cerebral edema can appear. Parathyroid glands are not regulated by the cerebral cortex or the pituitary.</p>  |
| <p>Magnetic resonance imaging (MRI) has revealed a brain tumor in a patient. You recognize the patient's likely need for which treatment modality?</p> <p>A. Surgery<br/>B. Chemotherapy</p>   | <p>A<br/>Surgical removal is the preferred treatment for brain tumors.</p>   |

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| <p>C. Radiation therapy<br/>D. Pharmacologic treatment</p>  |   |
| <p>What is most important finding for you to act on for a patient who had a craniotomy?<br/>A. Sodium: 134 mEq/L<br/>B. While blood cell (WBC) count: 11,000/L<br/>C. Urine specific gravity: 1.001<br/>D. Blood urea nitrogen (BUN): 25 mg/dL</p>  | <p>C<br/>Patients need frequent monitoring for sodium regulation, onset of diabetes insipidus, and severe hypovolemia. Normal specific gravity for urine should not be below 1.003 and this low value is a priority.</p>  |
| <p>What action should you take as part of care for a patient who had a craniotomy?<br/>A. Use promethazine (Phenergan) for nausea.<br/>B. Position the patient on the operative side if a bone flap was removed.<br/>C. Administer phenytoin (Dilantin) by rapid intravenous push (IVP) every 6 hours.<br/>D. Keep the head in alignment with the trunk.</p>                                    | <p>D<br/>The primary goal of care after cranial surgery is prevention of increased intracranial pressure (ICP), which includes keeping the body in alignment. Use of promethazine is discouraged because it can increase somnolence and alter the accuracy of a neurologic assessment. The patient is not positioned on the operative side if a bone flap was removed (craniectomy). Dilantin is administered slowly, no faster than 25 to 50 mg/min.</p> |
| <p>Preventing which problem is a priority nursing goal for a patient who had cranial surgery today?<br/>A. Pain<br/>B. Increased ICP<br/>C. Infection<br/>D. Malnutrition</p>   | <p>B<br/>The primary goal of care after cranial surgery is prevention of increased ICP. Other priorities are monitoring neurologic function, fluid and electrolyte levels, and serum osmolality. The brain does not have pain receptors, although the patient can have a headache. However, increased ICP remains a priority. Infection is not a priority the day of surgery, and nutrition is important, but increased ICP is the priority.</p>          |
| <p>What is the most likely cause of a brain abscess?<br/>A. Secondary metastasis from another site<br/>B. Infection from a tick or mosquito bite<br/>C. Direct extension from a sinus infection<br/>D. Spread of Neisseria meningitidis infection</p>   | <p>C<br/>The primary cause of a brain abscess is direct extension from ear, tooth, mastoid, or sinus infection. Secondary metastasis is the source of brain tumors. Tick or mosquito bites are associated with viral meningitis. N. meningitidis is a cause of bacterial meningitis.</p>  |
| <p>The following patients are in the emergency department. Which one is a priority for treatment?<br/>A. A college student with suspected bacterial meningitis<br/>B. A teenager who had a partial seizure an hour earlier and is now awake<br/>C. Patient with a history of stroke last year with residual hemiparesis<br/>D. Patient with suspected trigeminal neuralgia (tic douloureux)</p> | <p>A<br/>Bacterial meningitis is considered a medical emergency. The other patients are currently stable.</p>   |
| <p>What is a key clinical manifestation of classic bacterial meningitis?<br/>A. Temperature<br/>B. Nystagmus<br/>C. Tachycardia<br/>D. Nuchal rigidity</p>  | <p>D<br/>Fever, severe headache, vomiting, and nuchal rigidity (neck stiffness) are key clinical manifestations of meningitis.</p>  |
| <p>The patient is admitted with a diagnosis of bacterial meningitis. The patient has a temperature of 101° F and a headache rated as an 8. Which prescription has a priority for you to administer?<br/>A. IV cefuroxime (Ceftin)<br/>B. Vital signs<br/>C. PO acetaminophen (Tylenol)<br/>D. Neurologic check</p>  | <p>A<br/>Bacterial meningitis is a medical emergency, and treating the cause is a priority over treating the symptoms or further assessing effects of the disease process. The antibiotic may be given after cultures are obtained but before the diagnosis is confirmed.</p>   |
| <p>A wife indicates she has been providing care to her husband, who was diagnosed with bacterial meningococcal meningitis. What is your most important action related to the wife?<br/>A. Teach airborne isolation precautions.<br/>B. Assess her for respiratory infection.<br/>C. Explain the signs of meningitis.<br/>D. Provide prophylactic antibiotics.</p>                               | <p>D<br/>Persons who have close contact with anyone who has bacterial meningitis should be given prophylactic antibiotics, and this supersedes all other actions because she has been exposed. Meningococcal meningitis is highly contagious.</p>   |
| <p>The patient with bacterial meningitis has irritation of cranial nerve (CN) II. What symptom would you expect the patient to have?<br/>©Stefanie Benton</p>   | <p>CN II is the optic nerve, and when compressed from the increased ICP, papilledema (swelling of the optic disc) is often present and<br/>Do not copy or distribute without permission</p>   |

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| <p>A. Inability to hear whispered words<br/>         B. Abnormal pronation and supination test result<br/>         C. Papilledema<br/>         D. Dysphagia</p>   | <p>blindness may occur. The acoustic nerve is CN VIII. Assessing abnormal pronation or supination is a coordination/balance test for cerebellar function. Dysphagia can be a symptom of CN IX and CN X abnormalities.</p>   |
| <p>You are assigned to four patients on the clinical unit. Which patient should you assess first?<br/>         A. Patient with a skull fracture whose nose is bleeding<br/>         B. Elderly patient with a stroke who is confused and whose daughter is present<br/>         C. Patient with meningitis who is suddenly agitated and reporting a headache of 10 on a 0 to 10 scale<br/>         D. Patient who had a craniotomy for a brain tumor 3 days earlier and has continued emesis</p>  | <p>C<br/>         The patient with meningitis should be seen first. Patients with meningitis must be observed closely for manifestations of increased ICP, which is thought to be a result of swelling around the dura and increased cerebrospinal fluid (CSF) volume. Sudden change in the level of consciousness or a change in behavior along with a sudden, severe headache may indicate an acute episode of increased ICP. The postoperative cranial surgery patient should be seen second; although nausea and vomiting are common after cranial surgery and can result in increased ICP. Nausea and vomiting should be treated with antiemetics. The patient with a skull fracture needs to be evaluated for CSF leakage occurring with the nosebleed and should be seen third. Confusion after a stroke may be expected; the patient should be safe with a family member present.</p> |
| <p>What nursing measure is indicated to reduce the potential for seizures and increased ICP in a patient with bacterial meningitis?<br/>         A. Administering codeine for relief of head and neck pain<br/>         B. Controlling fever with prescribed drugs and cooling techniques<br/>         C. Keeping the room darkened and quiet to minimize environmental stimulation<br/>         D. Maintaining the patient on strict bed rest with the head of the bed slightly elevated</p>   | <p>B<br/>         Fever must be vigorously managed because it increases cerebral edema and the frequency of seizures. Neurologic damage may result from an extremely high temperature over a prolonged period. Acetaminophen or aspirin may be used to reduce fever; other measures, such as a cooling blanket or sponge baths with tepid water, may be effective in lowering the temperature.</p>  |
| <p>You assess a patient for signs of meningeal irritation and observe her for nuchal rigidity. Which option indicates the presence of this sign of meningeal irritation?<br/>         A. Tonic spasms of the legs<br/>         B. Curling in a fetal position<br/>         C. Arching of the neck and back<br/>         D. Resistance to flexion of the neck</p>  | <p>D<br/>         Nuchal rigidity is a clinical manifestation of meningitis. During assessment, the patient resists passive flexion of the neck by the health care provider.</p>  |
| <p>What is the difference between viral and bacterial meningitis?<br/>         A. Viral meningitis is treated with sulfa drugs, and bacterial meningitis is treated with penicillin.<br/>         B. Full recovery is expected with the viral form, but more serious residual effects are seen with the bacterial form.<br/>         C. Viral meningitis is considered more ominous because serious brain involvement is experienced.<br/>         D. Typical signs of viral meningitis are diplopia and fasciculations, whereas signs of bacterial meningitis are fever and nuchal rigidity.</p> | <p>B<br/>         Full recovery is expected from viral meningitis, and any residual effects are rare and minor compared with those of bacterial meningitis. The bacterial form can cause dementia, seizures, deafness, hemiplegia, and hydrocephalus. Viral meningitis is managed symptomatically because the disease is self-limiting, a full recovery is expected, and there usually is no brain involvement. Antibiotics are not used for viruses. Both forms manifest with the symptoms of headache, fever, photophobia, and stiff neck.</p>  |
| <p>What is the best patient to assign to a new graduate nurse on her first week of orientation?<br/>         A. Patient with bacterial meningitis admitted from the emergency department today<br/>         B. Patient returning from a craniotomy for a pituitary brain tumor<br/>         C. Patient with head trauma with suspected epidural bleed admitted 3 hours earlier<br/>         D. Patient with viral meningitis who is being discharged today</p>  | <p>D<br/>         The new nurse should have the patient who is the most stable and has a predictable outcome. That is the patient with the less serious condition of viral meningitis who is being discharged. The other three patients are potentially unstable and need skilled nursing assessments.</p>  |
| <p>Which measure is most effective in preventing the spread of viral meningitis?<br/>         A. Have close personnel wear surgical masks.<br/>         B. Avoid touching respiratory secretions.<br/>         C. Obtain yearly vaccinations.<br/>         D. Gargle daily with salt water</p>  | <p>B<br/>         Viral meningitis is usually acquired through direct contact with respiratory secretions. Bacterial meningitis has respiratory precautions until the cultures are negative, and precautions require a particulate respirator mask rather than surgical mask. There is no yearly vaccination for viral meningitis. The use of Haemophilus influenzae vaccine has decreased the incidence of bacterial meningitis caused by this organism, and the vaccine against Neisseria</p>   |

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|  | meningitides provides protection against that organism that causes bacterial meningitis. Gargling with salt water is a helpful home measure, but not touching infectious secretions is more effective.  |
| <p>What is the best preventive measure for West Nile virus encephalitis?</p> <p>A. Yearly vaccination<br/>B. Contact isolation<br/>C. Avoidance of standing water<br/>D. Prophylactic acyclovir (Zovirax)</p>  | <p>C</p> <p>Encephalitis is usually caused by a virus that is transmitted by ticks and mosquitoes. To prevent encephalitis, avoid standing water where mosquitoes can breed. There is no vaccination. Contact isolation does not prevent contracting the disease. Acyclovir is used to treat the disease.</p>   |
| <p>The patient has West Nile virus encephalitis and seizures for which phenytoin (Dilantin) is prescribed. What is essential for you do regarding administration?</p> <p>A. Dilute the intravenous (IV) drug in 5% dextrose.<br/>B. Assist the patient to maintain good oral hygiene.<br/>C. Notify the health care provider if the patient becomes drowsy during IV administration.<br/>D. Verify that the levels are between 40 and 60 <math>\mu</math>mL before administration.</p> | <p>B</p> <p>A side effect of Dilantin is gingival hyperplasia, and good oral care minimizes this side effect. The IV drug is diluted in normal saline and will precipitate in D5W. Drowsiness is an expected side effect of IV administration of the drug. Therapeutic levels are between 10 and 20 <math>\mu</math>mL.</p>   |
| <p>Which assessment finding is most important for you to follow-up in a newly admitted adult patient diagnosed with viral encephalitis?</p> <p>A. Positive Babinski sign<br/>B. Negative Kernig sign<br/>C. Doll's-eye reflex<br/>D. Deep tendon reflex 2+</p>   | <p>A</p> <p>Adults have a negative Babinski sign (toes curl downward, plantar reflex). A positive sign in an adult can indicate disease of the brain or spinal cord. The other signs are normal findings.</p>   |
| <p>The patient is newly diagnosed with encephalitis caused by herpes simplex virus (HSV) infection. What is essential for you to do?</p> <p>A. Administer penicillin.<br/>B. Administer acyclovir.<br/>C. Perform a Glasgow Coma Scale assessment.<br/>D. Facilitate a magnetic resonance imaging (MRI) study.</p>   | <p>B</p> <p>Encephalitis is usually viral, and it is treated with antiviral acyclovir (Zovirax). For maximum benefit, the drug should be started in a timely manner. Penicillin is used for bacterial meningitis. Because the diagnosis is known, treatment of the cause is more important than additional assessment.</p>  |
| <p>What is the most effective measure for rabies after a patient has sustained a bite by an animal thought to be infected?</p> <p>A. Antibiotic administration<br/>B. Contact isolation<br/>C. Wound irrigation<br/>D. Rapid postexposure prophylaxis</p>  | <p>D</p> <p>Rabies usually is fatal. Management efforts are directed at preventing the transmission and onset of the disease, and postexposure prophylaxis is administered. It is more effective than the other measures.</p>   |
| <p>The patient had an ischemic stroke 5 hours earlier. What treatment do you anticipate?</p> <p>A. Administer nicardipine (Cardene) for the patient's blood pressure of 200/100 mm Hg.<br/>B. Administer systemic thrombolytic tissue plasminogen activator (tPA).<br/>C. Make patient NPO.<br/>D. Administer acetaminophen (Tylenol) prophylactically.</p>  | <p>C</p> <p>About 25% of patients worsen in the first 24 to 48 hours after a stroke. Patients should have nothing by mouth (NPO) until the stroke has stabilized to ensure there is no progression to loss of gag reflex and aspiration. Elevated blood pressure is common immediately after a stroke and may be a protective response to maintain cerebral perfusion. A drug is not used to lower blood pressure unless the systolic pressure is more than 220 mm Hg. Systemic tPA must be administered within 3 to 4.5 hours of stroke onset. The patient's temperature is treated, but not prophylactically.</p> |
| <p>The patient had an ischemic stroke and is undergoing rehabilitation. He is diagnosed with homonymous hemianopsia. What should you do?</p> <p>A. Better arrange the environment to suit the patient's needs.<br/>B. Teach the patient to turn his head to scan the environment.<br/>C. Obtain prescriptive glasses for the patient.<br/>D. Have the patient wear an eye patch.</p>   | <p>B</p> <p>Homonymous hemianopsia (blindness in the same half of each visual field) is a common problem. Persistent disregard of objects in part of the visual field should alert you to this possibility. In rehabilitation, the patient should learn to compensate by consciously attending to or by scanning the neglected side. Early immediate intervention involves arranging the environment within the patient's perceptual field. Glasses do not help the problem. Diplopia (double vision) can be a problem and is treated with an eye patch.</p>  |

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| <p>The patient says, "The smoodle pinkered, and I want him square, and I want to plunthery him." What impairment do you suspect?</p> <p>A. Wernicke's aphasia<br/>B. Broca's aphasia<br/>C. Dysarthria<br/>D. Aphasia</p>  | <p>A<br/>Wernicke's aphasia is damage to the left temporal lobe, although it can result in damage to the right lobe. The patient may speak in long sentences that have no meaning, add unnecessary words, or even create words. In Broca's aphasia, the patient is able to understand but speaks only in short phrases that are difficult to produce. Dysarthria is a disturbance in the muscular control of speech. Impairments may involve pronunciation, articulation, and phonation. This condition does not affect meaning or comprehension of language but does affect the mechanics of speech. Aphasia is a total loss of comprehension and use of language or total inability to communicate.</p> |
| <p>The patient had a stroke on the left side of the brain (right hemiplegia). He is eating dinner and suddenly bursts into tears. How do you respond?</p> <p>A. Ask the patient about his feelings.<br/>B. Give him a tissue.<br/>C. Distract the patient.<br/>D. Obtain an antidepressant for patient.</p>  | <p>C<br/>Patients who have had strokes often exhibit emotional responses that are not appropriate for the situation. The behavior is out of context and often is unrelated to the underlying emotional state of the patient. Initially it is important to just distract the patient.</p>  |
| <p>Which modifiable risk factors for stroke are most important for you to include when planning a community education program?</p> <p>A. Hypertension<br/>B. Hyperlipidemia<br/>C. Alcohol consumption<br/>D. Oral contraceptive use</p>   | <p>A<br/>Hypertension is the single most important modifiable risk factor, but it is still often undetected and inadequately treated.</p>   |
| <p>You would expect to find which clinical manifestation in a patient admitted with a left-brain stroke?</p> <p>A. Impulsivity<br/>B. Impaired speech<br/>C. Left-sided neglect<br/>D. Short attention span</p>  | <p>B<br/>Clinical manifestations of left-sided brain damage include right hemiplegia, impaired speech and language aphasias, impaired right and left discrimination, and slow and cautious performance. The other options are all manifestations of right-sided brain damage.</p>   |
| <p>You are discharging a patient admitted with a transient ischemic attack (TIA). For which medications do you expect to provide discharge instructions (select all that apply)?</p> <p>A. Clopidogrel (Plavix)<br/>B. Enoxaparin (Lovenox)<br/>C. Dipyridamole (Persantine)<br/>D. Enteric-coated aspirin (Ecotrin)<br/>E. Tissue plasminogen activator (tPA)</p>   | <p>A,C,D<br/>Aspirin is the most frequently used antiplatelet agent. Other drugs used to prevent clot formation include clopidogrel (Plavix), ticlopidine (Ticlid), dipyridamole (Persantine), combined dipyridamole and aspirin (Aggrenox), and anticoagulant drugs, such as oral warfarin (Coumadin). The tPA is a fibrinolytic medication used to treat acute ischemic stroke, not prevent TIAs.</p>   |
| <p>Which nursing intervention is most appropriate when communicating with a patient suffering from aphasia after a stroke?</p> <p>A. Present several thoughts at once so that the patient can connect the ideas.<br/>B. Ask open-ended questions to provide the patient the opportunity to speak.<br/>C. Use simple, short sentences accompanied by visual cues to enhance comprehension.<br/>D. Finish the patient's sentences to minimize the frustration associated with slow speech.</p> | <p>C<br/>When communicating with a patient with aphasia, you should present one thought or idea at a time; ask questions that can be answered with yes, no, or another simple word; use visual cues; and allot time for the individual to comprehend and respond to the conversation.</p>   |
| <p>Computed tomography of a 68-year-old patient's head reveals that he has experienced a hemorrhagic stroke. Which option is a nursing priority intervention in the emergency department?</p> <p>A. Maintenance of the patient's airway<br/>B. Positioning to promote cerebral perfusion<br/>C. Control of fluid and electrolyte imbalances<br/>D. Administration of tissue plasminogen activator (tPA)</p>  | <p>A<br/>Maintenance of a patent airway is the priority in the acute care of a patient with a hemorrhagic stroke, and it supersedes the importance of fluid and electrolyte imbalance and positioning. Use of tPA is contraindicated in hemorrhagic stroke.</p>   |
| <p>A female patient has left-sided hemiplegia after an ischemic stroke that occurred 2 weeks earlier. How should you best promote the integrity of the patient's skin?</p> <p>A. Position the patient on her weak side most of the time.</p>   | <p>B<br/>A position change schedule should be established for stroke patients. An example is side-backside positioning, with a maximum</p>  |

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| <p>B. Alternate the patient between supine and side-lying positions.<br/> C. Avoid the use of pillows to promote independence in positioning.<br/> D. Establish a schedule for the massage of areas where skin breakdown emerges.</p>  | <p>duration of 2 hours for any position. The patient should be positioned on the weak or paralyzed side for only 30 minutes. Pillows may be used to facilitate positioning. Areas of skin breakdown should never be massaged.</p>  |
| <p>Which sensory-perceptual deficit is associated with a left-brain stroke?<br/> A. Overestimation of physical abilities<br/> B. Difficulty judging position and distance<br/> C. Slow and possibly fearful performance of tasks<br/> D. Impulsivity and impatience at performing tasks</p>  | <p>C<br/> Patients with a left-brain stroke (right hemiplegia) commonly are slower in organization and performance of tasks and may have a fearful, anxious response to a stroke. Overconfidence, spatial disorientation, and impulsivity are more commonly associated with a right-brain stroke.</p>  |
| <p>Which of the following patients is at highest risk for a stroke?<br/> A. An obese, 45-year-old Native American<br/> B. A 35-year-old Asian American woman who smokes<br/> C. A 32-year-old, white woman taking oral contraceptives<br/> D. A 65-year-old African American man with hypertension</p>   | <p>D<br/> Nonmodifiable risk factors for stroke include age (&gt;65 years), male gender, ethnicity or race (African Americans &gt; Hispanics, Native Americans/Alaska Natives, and Asian Americans &gt; whites), and family history of stroke or personal history of a transient ischemic attack or stroke. Modifiable risk factors for stroke include hypertension (most important), heart disease (especially atrial fibrillation), smoking, excessive alcohol consumption (causes hypertension), abdominal obesity, sleep apnea, metabolic syndrome, lack of physical exercise, poor diet (high in saturated fat and low in fruits and vegetables), and drug abuse (especially cocaine). Other risk factors for stroke include a diagnosis of diabetes mellitus, increased serum cholesterol, birth control pills (high levels of progestin and estrogen), history of migraine headaches, inflammatory conditions, hyperhomocysteinemia, and sickle cell disease.</p> |
| <p>Which factor related to cerebral blood flow most often determines the extent of cerebral damage from a stroke?<br/> A. Amount of cardiac output<br/> B. Oxygen content of the blood<br/> C. Degree of collateral circulation<br/> D. Level of carbon dioxide in the blood</p>   | <p>The extent of the stroke depends on rapidity of onset, the size of the lesion, and the presence of collateral circulation.</p>  |
| <p>What information provided by the patient can help differentiate a hemorrhagic stroke from a thrombotic stroke?<br/> A. Sensory disturbance<br/> B. A history of hypertension<br/> C. Presence of motor weakness<br/> D. Sudden onset of severe headache</p>   | <p>D<br/> A hemorrhagic stroke usually causes sudden onset of symptoms, including neurologic deficits, headache, nausea, vomiting, decreased level of consciousness, and hypertension. Ischemic stroke symptoms may progress in the first 72 hours as infarction and cerebral edema increase.</p>  |
| <p>A patient with right-sided hemiplegia and aphasia resulting from a stroke most likely has involvement of the<br/> A. brainstem.<br/> B. vertebral artery.<br/> C. left middle cerebral artery.<br/> D. right middle cerebral artery.</p>  | <p>C<br/> If the middle cerebral artery is involved in a stroke, the expected clinical manifestations include aphasia, motor and sensory deficit, and hemianopsia on the dominant side and include neglect, motor and sensory deficit, and hemianopsia on the nondominant side.</p>  |
| <p>You explain to the patient with a stroke who is scheduled for angiography that the test is used to determine the<br/> A. presence of increased intracranial pressure (ICP).<br/> B. site and size of the infarction.<br/> C. patency of the cerebral blood vessels.<br/> D. presence of blood in the cerebrospinal fluid.</p>   | <p>C<br/> Angiography provides visualization of cerebral blood vessels, can provide an estimate of perfusion, and can detect filling defects in the cerebral arteries.</p>   |
| <p>A patient experiencing TIAs is scheduled for a carotid endarterectomy. You explain that this procedure is done to<br/> A. decrease cerebral edema.<br/> B. reduce the brain damage that occurs during a stroke in evolution.<br/> C. prevent a stroke by removing atherosclerotic plaques blocking cerebral blood flow.<br/> D. provide a circulatory bypass around thrombotic plaques obstructing cranial circulation.</p> | <p>C<br/> In carotid endarterectomy, the atheromatous lesions are removed from the carotid artery to improve blood flow.</p>   |

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| <p>For a patient with a suspected stroke, which important piece of information should you obtain?</p> <p>A. Time of the patient's last meal<br/> B. Time at which stroke symptoms first appeared<br/> C. Patient's hypertension history and management<br/> D. Family history of stroke and other cardiovascular diseases</p> | <p><b>B</b><br/> During initial evaluation, the single most important point in the patient's history is the time of onset of stroke symptoms. If the stroke is ischemic, recombinant tissue plasminogen activator (tPA) must be administered within 3 to 4.5 hours of the onset of clinical signs; tPA reestablishes blood flow through a blocked artery and prevents brain cell death in patients with an acute onset of symptoms.</p>   |
| <p>Bladder training for a male patient who has urinary incontinence after a stroke includes</p> <p>A. limiting fluid intake.<br/> B. keeping a urinal in place at all times.<br/> C. assisting the patient to stand to void.<br/> D. catheterizing the patient every 4 hours.</p>   | <p><b>C</b><br/> In the acute stage of stroke, the primary urinary problem is poor bladder control and incontinence. Nurses should promote normal bladder function and avoid the use of indwelling catheters. A bladder retraining program consists of (1) adequate fluid intake, with most given between 8:00 AM and 7:00 PM; (2) scheduled toileting every 2 hours using a bedpan, commode, or bathroom; and (3) observing signs of restlessness, which may indicate the need for urination. Intermittent catheterization may be used for urinary retention (not urinary incontinence). During the rehabilitation phase after a stroke, nursing interventions focused on urinary continence include (1) assessment for bladder distention by palpation; (2) offering the bedpan, urinal, commode, or toilet every 2 hours during waking hours and every 3 to 4 hours at night; (3) focusing the patient on the need to urinate with a direct command; (4) assistance with clothing and mobility; (5) scheduling most fluid intake between 7:00 AM and 7:00 PM; and (6) encouraging the usual position for urinating (standing for men and sitting for women).</p> |
| <p>What are the common psychosocial reactions of the patient to the stroke (select all that apply)?</p> <p>A. Depression<br/> B. Disassociation<br/> C. Intellectualization<br/> D. Sleep disturbances<br/> E. Denial of the severity of the stroke</p>   | <p><b>A,D,E</b><br/> The patient with a stroke may experience many losses, including sensory, intellectual, communicative, functional, role behavior, emotional, social, and vocational losses. Some patients experience long-term depression and symptoms such as anxiety, weight loss, fatigue, poor appetite, and sleep disturbances. The time and energy required to perform previously simple tasks can result in anger and frustration. Frustration and depression are common in the first year after a stroke. A stroke is usually a sudden, extremely stressful event for the patient, caregiver, family, and significant others. The family is often affected emotionally, socially, and financially, as well as changing roles and responsibilities. Reactions vary considerably but may involve fear, apprehension, denial of the severity of the stroke, depression, anger, and sorrow.</p>   |
| <p>When is dementia usually diagnosed?</p> <p>A. Two brain functions are impaired.<br/> B. Memory is affected.<br/> C. Positive result is obtained on a computed tomography (CT) study.<br/> D. The patient fails the Benton Visual Form Discrimination Test (BVFD).</p>  | <p><b>A</b><br/> Dementia is usually diagnosed when two or more brain functions, such as memory loss or language skills, are significantly impaired. The Mini-Mental State Examination (MMSE) is used to assess cognitive effect. Although tests help to make the diagnosis, no single clinical test can be used to diagnose dementia, and it is primarily a diagnosis of exclusion.</p>  |
| <p>What are the two most common causes of dementia?</p> <p>A. Diabetes mellitus and hypercholesterolemia<br/> B. Neurodegenerative conditions and vascular disorders<br/> C. Effects of smoking and coronary artery disease<br/> D. Metabolic syndrome and systemic diseases</p>  | <p><b>B</b><br/> The two most common causes of dementia are neurodegenerative conditions (e.g., Alzheimer's disease) and vascular disorders. Risk factors include advanced age, family history, history of smoking, cardiac dysrhythmias, hypertension, hypercholesterolemia, diabetes mellitus, and coronary artery disease, and metabolic syndrome.</p>   |
| <p>Which statement is true regarding dementia?</p> <p>A. The patient is often the first one to be aware of the problem.<br/> B. Onset is usually relatively sudden.<br/> C. Initial memory loss consists of long-term memories.<br/> D. Thyroid deficiency is ruled out before the diagnosis.</p>                             | <p><b>D</b><br/> Screening for cobalamin (vitamin B12) deficiency and hypothyroidism are usually done before making the diagnosis. It is often a family member, particularly the spouse, who reports the patient's declining memory to the health care provider. The onset is usually insidious and gradual. In dementia, the memory loss initially relates to recent events, with long-term (remote) memories still</p>  |

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|   | intact. With time and progression of the dementia, memory loss includes short-term (recent) and long-term (remote) memory.  |
| Which nursing intervention is most appropriate when caring for patients with dementia?<br>A. Avoid direct eye contact.<br>B. Lovingly call the patient "honey" or "sweetie."<br>C. Give simple directions, focusing on one thing at a time.<br>D. Treat the patient according to their age-related behavior.  | C<br>When dealing with patients with dementia, tasks should be simplified, giving directions using gestures or pictures and focusing on one thing at a time. It is best to treat these patients as adults, with respect and dignity, even when their behavior is childlike. You should use gentle touch and direct eye contact. Calling the patient "honey" or "sweetie" can be condescending and does not demonstrate respect.   |
| Dementia is defined as a<br>A. syndrome that results only in memory loss.<br>B. disease associated with abrupt changes in behavior.<br>C. disease that is always due to reduced blood flow to the brain.<br>D. syndrome characterized by cognitive dysfunction and loss of memory.  | D<br>Dementia is a syndrome characterized by dysfunction or loss of memory, orientation, attention, language, judgment, and reasoning. Personality changes and behavioral problems such as agitation, delusions, and hallucinations may result.   |
| Vascular dementia is associated with<br>A. transient ischemic attacks.<br>B. bacterial or viral infection of neuronal tissue.<br>C. cognitive changes resulting from cerebral ischemia.<br>D. abrupt changes in cognitive function that are irreversible  | C<br>Vascular dementia is the loss of cognitive function resulting from ischemic, ischemic-hypoxic, or hemorrhagic brain lesions caused by cardiovascular disease. This type of dementia is the result of decreased blood supply from narrowing and blocking of arteries that supply the brain.   |
| The clinical diagnosis of dementia is based on<br>A. computed tomography (CT) or magnetic resonance spectroscopy (MRS).<br>B. brain biopsy.<br>C. electroencephalography.<br>D. patient history and cognitive assessment.   | D<br>The diagnosis of dementia focuses on determining the cause. A thorough physical examination is performed to rule out other potential medical conditions. Cognitive testing (e.g., Mini-Mental State Examination) is used to evaluate memory, ability to calculate, language, visual-spatial skills, and degree of alertness. A diagnosis of dementia related to vascular causes is based on cognitive loss, vascular brain lesions demonstrated by neuroimaging techniques, and exclusion of other causes of dementia. Structural neuroimaging with CT or magnetic resonance imaging (MRI) is used to evaluate patients with dementia. A psychological evaluation is indicated to assess for depression. |
| Which statement accurately describes mild cognitive impairment (MCI)?<br>A. People with MCI are often unaware that they have any deficiencies.<br>B. Most people with MCI go on to develop dementia.<br>C. You need to emphasize the need to take drug therapy consistently.<br>D. You must monitor the person for disorientation or feeling lost in a familiar place.                            | D<br>Persons with MCI should be monitored for the 10 signs of Alzheimer's disease (AD) and signs that they are progressing into dementia. The person with MCI is often aware of a significant change in memory, which also is noticed by family members. A person with dementia is unaware of deficits. Having MCI puts an individual at risk for dementia, and an estimated 15% of people with MCI eventually develop dementia. No drugs are approved for the treatment of MCI   |
| What is a typical description of a person diagnosed with MCI?<br>A. Does not remember knowing a person<br>B. Forgets what an item is used for<br>C. Slow to recall people's names<br>D. Loses sense of time and day   | C<br>The person with MCI frequently forgets people's names and is slow to recall them. The other options describe typical behaviors seen in AD.   |
| Which statements accurately describe MCI (select all that apply)?<br>A. Always progresses to AD<br>B. Caused by variety of factors and may progress to AD<br>C. Should be aggressively treated with acetylcholinesterase drugs<br>D. Caused by vascular infarcts, which if treated, can delay progression to AD<br>E. Patient is usually not aware that there is a problem with his or her memory | B<br>Although some individuals with MCI revert to normal cognitive function or do not go on to develop AD, those with MCI are at high risk for AD. No drugs have been approved for the treatment of MCI. Research is being conducted to determine whether patients with MCI can benefit from the medications used in AD (e.g., acetylcholinesterase inhibitors). A person MCI is often aware of a significant change in memory.   |
|   | C<br>Characteristic findings of AD are related to changes in the brain's structure and functions: (1) amyloid plaques (more in certain parts  |

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| <p>What does the pathophysiology of Alzheimer's disease (AD) most commonly involve?</p> <p>A. Presence of presenilin-1 and presenilin-2 genes<br/> B. Dissolving of plaques in brain tissue<br/> C. Changes in brain structure and function<br/> D. Residual inflammation from arboviruses</p>   | <p>of the brain); (2) neurofibrillary tangles (more plentiful than normally seen); and (3) loss of connections between cells and cell death (and atrophy). Three genes are important in the cause of early-onset AD, but only a small percentage of people younger than 60 years develop AD. All individuals develop plaques in their brain tissue as part of aging, but in AD, there are more plaques in certain parts of the brain. Encephalitis is a treatable cause of dementia.</p> |
| <p>Why does the health care provider prescribe a cholinesterase inhibitor (e.g., donepezil [Aricept]) for a patient with AD?</p> <p>A. Cure the disease<br/> B. Stop any further decline<br/> C. Slow the rate of decline<br/> D. Treat co-morbidity of depression</p>   | <p>C<br/> Cholinesterase inhibitors are used to slow the rate of decline of the disease and the worsening of symptoms. There is no cure for AD, which is a chronic, progressive disease. Treating depression that is often associated with AD may improve cognitive ability, and antidepressants are prescribed.</p>   |
| <p>You approach the patient with AD to provide her bath. The patient states, "Go away! I'm not taking a bath." What is your initial response?</p> <p>A. Leave and reapproach in a few minutes.<br/> B. Ask the patient why she feels that way.<br/> C. Inform the patient that the physician will be notified.<br/> D. Obtain additional help and proceed with the bath.</p>   | <p>A<br/> Behavioral problems occur in about 90% of patients with AD. They can respond to redirection, reapproach, distraction, and reassurance. Persons with AD have limited verbal skills and are not able to respond to "why" questions. You should not threaten with restraints or to call the physician. It is always preferable to try a nonthreatening approach first, especially for something that is not absolutely essential.</p>   |
| <p>The patient with AD is significantly more agitated and restless today. What action should you take first?</p> <p>A. Look at urine characteristics.<br/> B. Assess room temperature.<br/> C. Reassure the patient that she is safe.<br/> D. Allow the patient an area to pace in.</p>  | <p>A<br/> Behavioral problems are often the patient's way of responding to a precipitating factor. Initially, the physical status should be evaluated. Urinary problems and pneumonia are the most common causes. Assessing the environment and reassuring the patient should then take place. The behavior should not be allowed to continue without trying to assess a cause for it.</p>   |
| <p>When providing community health care teaching regarding the early warning signs of AD, which signs would you advise family members to report (select all that apply)?</p> <p>A. Misplacing car keys<br/> B. Loses the sense of time<br/> C. Difficulty performing familiar tasks<br/> D. Problems with performing basic calculations<br/> E. Becoming lost in a usually familiar environment</p>  | <p>B,C,D,E<br/> Difficulty performing familiar tasks, problems with performing basic calculations, and becoming lost in a usually familiar environment are early warning signs of AD. Misplacing car keys is a normal frustrating event for many people.</p>   |
| <p>Which statement by the wife of a patient with AD demonstrates an accurate understanding of her husband's medication regimen?</p> <p>A. "I'm really hoping his medications will slow down his mental losses."<br/> B. "We're both holding out hope that this medication will cure his disease."<br/> C. "I know that this won't cure him, but we learned that it may prevent a bodily decline while he declines mentally."<br/> D. "I learned that if we are vigilant about his medication schedule, he may not experience the physical effects of his disease."</p> | <p>A<br/> There is no cure for AD, and drug therapy aims at improving or controlling the decline in cognition. Medications do not directly address the physical manifestations of AD.</p>  |
| <p>For which patient should you prioritize an assessment for depression?</p> <p>A. A patient in the early stages of AD<br/> B. A patient who is in the final stages of AD<br/> C. A patient experiencing delirium resulting from dehydration<br/> D. A patient who has become delirious after an atypical drug response</p>  | <p>A<br/> Patients in the early stages of AD are particularly susceptible to depression, because the patient is aware of his or her cognitive changes and the expected disease trajectory. Delirium is typically a short-term health problem that does not typically pose a heightened risk of depression.</p>   |
| <p>The early stage of AD is characterized by</p> <p>A. no noticeable change in behavior.<br/> B. memory problems and mild confusion.<br/> C. increased time spent sleeping or in bed.<br/> D. incontinence, agitation, and wandering behavior.</p>   | <p>B<br/> An initial sign of AD is a subtle deterioration in memory.</p>   |

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| <p>What is a major goal of treatment for the patient with AD?</p> <p>A. To maintain patient safety<br/> B. To maintain or increase body weight<br/> C. To return to a higher level of self-care<br/> D. To enhance functional ability over time</p>  | <p>A</p> <p>The overall goals are that the patient with AD will (1) maintain functional ability for as long as possible, (2) be maintained in a safe environment with a minimum of injuries, (3) have personal care needs met, and (4) have dignity maintained. You should emphasize patient safety while planning and providing nursing care.</p>  |
| <p>Along with dementia, what additional symptom is characteristic of Lewy body dementia?</p> <p>A. Myasthenia gravis<br/> B. Extrapyrarnidal signs<br/> C. Ataxia<br/> D. Multiple sclerosis</p>   | <p>B</p> <p>Lewy body dementia has Lewy bodies in the brainstem and cortex. In addition to dementia, it is characterized by at least two of the following: extrapyramidal signs, fluctuating cognitive ability, and hallucinations.</p>   |
| <p>What is a common priority nursing need for a patient with Lewy body dementia?</p> <p>A. Dysphasia<br/> B. Apraxia<br/> C. Visual agnosia<br/> D. Dysphagia</p>  | <p>D</p> <p>Patients with Lewy body dementia have problems with dysphagia and immobility. Swallowing problems can lead to impaired nutrition. All dementia patients can have problem with comprehending language and oral communication (dysphasia), inability to manipulate objects or perform purposeful acts (apraxia), and inability to recognize objects of sight (visual agnosia). Dysphagia (trouble with swallowing) is a priority.</p> |
| <p>What is the classic source for transmission of the small infectious pathogen (prion protein) in Creutzfeldt-Jakob disease?</p> <p>A. Dogs<br/> B. Ticks<br/> C. Seafood<br/> D. Cows</p>  | <p>D</p> <p>The source is beef obtained from animals contaminated with bovine spongiform encephalopathy. The disease is also known as mad cow disease.</p>  |
| <p>What distinguishes Creutzfeldt-Jakob disease from Alzheimer disease (AD)?</p> <p>A. A curative drug exists.<br/> B. Rheumatoid arthritis develops.<br/> C. Involuntary muscle jerks are present.<br/> D. A fine, papular, pink rash develops.</p>   | <p>C</p> <p>Creutzfeldt-Jakob disease is a rare and fatal brain disorder. The earliest symptom may be memory impairment and behavioral changes. The disease progresses rapidly, with mental deterioration, involuntary movement (muscle jerks), weakness in the limbs, blindness, and eventually coma. There is no treatment.</p>   |
| <p>Creutzfeldt-Jakob disease is characterized by</p> <p>A. remissions and exacerbations over many years.<br/> B. memory impairment, muscle jerks, and blindness.<br/> C. Parkinsonian symptoms including muscle rigidity and tremors at rest.<br/> D. increased intracranial pressure secondary to decreased cerebrospinal fluid drainage.</p>                         | <p>B</p> <p>Creutzfeldt-Jakob disease is a fatal brain disorder caused by a prion protein. The earliest symptom of the disease may be memory impairment and behavioral changes. The disease progresses rapidly with mental deterioration, involuntary movements (muscle jerks), weakness in the limbs, blindness, and eventually coma. R</p>  |
| <p>What is the appropriate task to delegate to the licensed practical nurse (LPN) who is taking care of a patient with Pick's disease?</p> <p>A. To administer sertraline (Zoloft)<br/> B. To administer the Mini-Mental State Examination (MMSE)<br/> C. To find out about the caregiver's stress level<br/> D. To make the initial referral to a day care center</p> | <p>A</p> <p>Pick's disease is frontotemporal dementia, in which the frontal and temporal anterior lobes of the brain shrink. It is characterized by disturbances in behavior, sleep, personality, and eventually memory with eventual dementia. LPNs can administer routine drugs. They should not perform assessments, make referrals, or generate nursing care plans.</p>   |
| <p>What is a common occurrence due to the strange behavior in Pick's disease?</p> <p>A. Patients are institutionalized sooner than those with other dementias.<br/> B. Polypharmacy results from multiple drug regimens.<br/> C. Psychiatrists often see these patients first.<br/> D. Electroconvulsive therapy (ECT) is often used.</p>                              | <p>C</p> <p>Because of the strange behavior associated with frontotemporal dementia, psychiatrists often see these patients first.</p>  |
| <p>What is the treatment of choice for normal pressure hydrocephalus?</p>  | <p>B</p> <p>Normal pressure hydrocephalus results from an obstruction in</p>  |

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| <p>A. Donepezil (Aricept)<br/>B. Shunt<br/>C. Furosemide (Lasix)<br/>D. Aspiration</p>  | <p>the flow of cerebrospinal fluid (CSF), which causes a buildup of CSF fluid in the brain. Manifestations of the condition include dementia, urinary incontinence, and difficulty walking. Meningitis, encephalitis, or head injury may cause the condition. If diagnosed early, it is treated by surgically inserting a shunt to divert the fluid.</p>  |
| <p>What is a key distinction of delirium compared with dementia?<br/>A. Sudden cognitive impairment<br/>B. Confusion related to time<br/>C. Distorted perceptions<br/>D. Worse in the morning</p>   | <p>A<br/>The person with delirium is more likely to exhibit sudden cognitive impairment, disorientation, or clouded sensorium. Dementia is usually insidious. Delirium is rapid, often occurring at night. Confusion related to time and distorted perceptions are true for both. Depression is characterized by worse symptoms in the morning.</p>   |
| <p>What characteristic differentiates delirium from dementia?<br/>A. Answers orientation questions with "I don't know"<br/>B. Altered alertness (hypovigilant or hypervigilant)<br/>C. Has a consistent course<br/>D. Is treated with donepezil (Aricept)</p>   | <p>B<br/>Delirium is characterized by an acute onset, a fluctuating course, inattention, disorganized thinking, and altered level of consciousness but confusion. Dementia is characterized by a normal level or alertness but confusion. Answers to orientation questions such as "I don't know" are elicited from persons with depression. Dementia has a consistent course; delirium fluctuates. Dementia is treated with Aricept. Treatment of delirium focuses on the treatment of precipitating factors.</p>  |
| <p>What is a common cause of delirium?<br/>A. Prion protein<br/>B. Microscopic deposits of Pick bodies<br/>C. Abnormal deposits of protein alpha-synuclein<br/>D. Severe, acute illness</p>   | <p>D<br/>Delirium is often the result of the interaction of the patient's underlying condition with a precipitating event. Common causes in a vulnerable (especially older) adult include fluid and electrolyte abnormalities, drug administration, surgery, acute or worsening significant illness, and withdrawal from drugs or alcohol. Prion protein is found in Creutzfeldt-Jakob disease. Microscopic deposits of Pick bodies are found in frontotemporal dementia (Pick's disease). Abnormal deposits of protein alpha-synuclein are found in Lewy body dementia.</p>  |
| <p>What nursing actions can help to minimize the risk of delirium in an older, hospitalized patient (select all that apply)?<br/>A. Identification of high risk patients<br/>B. Providing patient's glasses and hearing aid<br/>C. Consistent nursing staff near the nursing station<br/>D. Having a clock and calendar available<br/>E. Administering anticholinergic drugs prophylactic</p>         | <p>A,B,C,D<br/>Identify high-risk patients, including those with neurologic disorders, sensory impairment, or advanced age. Other risk factors include hospitalization in an intensive care unit, lack of a watch or calendar, absence of reading glasses, and untreated pain. Precipitating factors are eliminated. Assess for drug and alcohol withdrawal, fluid and electrolyte imbalance, nutritional deficiencies, and infection. Care includes protecting from harm, increasing familiarity with the environment, and reorientation and behavioral interventions. Polypharmacy is a common cause; drugs are not used prophylactically for this problem.</p> |
| <p>After you administer a dose of risperidone (Risperdal) to a patient with delirium, which intended effect of the medication do you assess for?<br/>A. Lying quietly in bed<br/>B. Alleviation of depression<br/>C. Reduction in blood pressure<br/>D. Disappearance of confusion</p>  | <p>A<br/>Risperidone is an antipsychotic drug that reduces agitation and produces a restful state in patients with delirium. However, it should be used with caution</p>  |
| <p>Which patient may be at greatest risk for delirium?<br/>A. A patient with fibromyalgia whose chronic pain has recently worsened<br/>B. An elderly patient whose recent computed tomography study shows brain atrophy<br/>C. A patient with a fracture who has spent the night in the emergency department<br/>D. An elderly patient who takes multiple medications for various health problems</p> | <p>D<br/>Polypharmacy is implicated in many cases of delirium, and this phenomenon is especially common among older adults. Brain atrophy, if associated with cognitive changes, is indicative of dementia. Alterations in sleep and environment and pain may cause delirium, but this is less of a risk than taking multiple medications by an older adult.</p>  |

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| <p>Benzodiazepines are indicated in the treatment of cases of delirium that have which cause?</p> <p>A. Polypharmacy<br/>B. Cerebral hypoxia<br/>C. Alcohol withdrawal<br/>D. Electrolyte imbalances</p>   | <p>C</p> <p>Benzodiazepines can be used to treat delirium associated with sedative and alcohol withdrawal. However, these drugs may worsen delirium caused by other factors and must be used cautiously.</p>  |
| <p>Which patient is most at risk for delirium?</p> <p>A. A 50-year-old woman with cholecystitis<br/>B. A 19-year-old man with a fractured femur<br/>C. A 42-year-old woman having an elective hysterectomy<br/>D. A 78-year-old man admitted to the medical unit with complications related to heart failure</p>   | <p>D</p> <p>Risk factors that can precipitate delirium include age 65 years or older, male gender, and severe, acute illness (e.g., heart failure). The 78-year-old man has the most risk factors for delirium.</p>   |
| <p>During the nursing assessment the patient states that she is experiencing headaches bilaterally that are described as pressing or tightening. The headaches last from a few minutes to days and the pain is described as a 5 on a scale of 1 to 10. These signs and symptoms are consistent with which type of headache?</p> <p>A. Sinus<br/>B. Cluster<br/>C. Tension<br/>D. Migraine</p>                                    | <p>C</p> <p>Tension-type headache, the most common type of headache, is characterized by its bilateral location and pressing/tightening quality. Tension-type headaches are usually of mild or moderate intensity and not aggravated by physical activity.</p>  |
| <p>Which of the following are characteristic of a tension-type headache?</p> <p>A. The patient experiences an aura.<br/>B. They are aggravated by physical activity.<br/>C. Nausea and vomiting are present.<br/>D. They involve photosensitivity.</p>   | <p>D</p> <p>Tension-type headaches are usually of mild or moderate intensity and not aggravated by physical activity. Tension-type headaches are subcategorized as episodic or chronic. Tension-type headaches can last from minutes to days. There is no prodrome (early manifestation of impending disease) in tension-type headache. The headache does not involve nausea or vomiting but may involve sensitivity to light (photophobia) or sound (phonophobia).</p> |
| <p>The pain reliever of choice for patients experiencing a tension type headache is</p> <p>A. meperidine hydrochloride (Demerol).<br/>B. morphine sulfate (Morphine).<br/>C. codeine sulfate (Codeine).<br/>D. acetaminophen (Tylenol).</p>  | <p>D</p> <p>Drug treatment for tension-type headache usually involves a nonopioid analgesic (e.g., aspirin, acetaminophen) used alone or in combination with a sedative, muscle relaxant, tranquilizer, or codeine.</p>   |
| <p>You would identify which tool as the most useful for diagnosing a tension headache?</p> <p>A. CT scan<br/>B. Electromyography (EMG)<br/>C. Careful history taking<br/>D. Assessment of deep tendon reflexes</p>   | <p>C</p> <p>Careful history taking is probably the most important tool for diagnosing tension-type headache. Electromyography (EMG) may be performed. This test may reveal sustained contraction of the neck, scalp, or facial muscles. However, many patients may not show increased muscle tension with this test, even when the test is done during the actual headache.</p>   |
| <p>. During the nursing assessment the patient identifies experiencing episodic headaches with pain described as a 10 on a scale of 1 to 10. The patient describes the pain as unilateral and located on the left side, lasting for 2 to 3 days. The patient also experiences nausea. You would determine the patient was experiencing which type of headache?</p> <p>A. Sinus<br/>B. Cluster<br/>C. Tension<br/>D. Migraine</p> | <p>D</p> <p>Migraine headache is a recurring headache characterized by unilateral (sometimes bilateral) throbbing pain, a triggering event or factor, strong family history, and manifestations associated with neurologic and autonomic nervous system dysfunction.</p>  |
| <p>When presenting information to a nursing student regarding migraine headaches, you would identify which age group as most affected by migraine headaches?</p> <p>A. Adolescents<br/>B. 20 to 30 year olds</p>   | <p>B</p> <p>The most common age for onset of migraine is between the ages of 20 and 30 years. Migraine affects as many as 17% of females and 6% of males in the United States.</p>  |

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| <p>C. 40 to 50 year olds<br/>D. Older adults aged 60 and greater</p>  |  |
| <p>The patient with migraines asks you why "everyone always asks if anyone in the family has a history of migraines." Your priority response is</p> <p>A. "It is standard practice to assess a person's history to identify potential health risks"<br/>B. "Around 70% of individuals with migraines have a relative who also has migraines."<br/>C. "Assessing your history identifies the treatment plan."<br/>D. "This assessment provides a baseline for future assessments."</p> | <p>B<br/>Approximately 70% of those with migraine have a first-degree relative who also had migraine headaches.</p>  |
| <p>8. For mild-to-moderate migraines you would anticipate the use of which medication?</p> <p>A. Aspirin or acetaminophen<br/>B. Ibuprofen<br/>C. Sumatriptan (Imitrex)<br/>D. Codeine</p>  | <p>A<br/>Many people with mild or moderate migraine can obtain relief with aspirin or acetaminophen.</p>   |
| <p>You would question the use of sumatriptan (Imitrex) in which patient?</p> <p>A. A patient with a history of gastric ulcer disease<br/>B. A patient with a history of heart disease<br/>C. A person allergic to yeast<br/>D. A person allergic to cheese</p>  | <p>B<br/>Because these drugs cause vasoconstriction of coronary arteries, they need to be avoided in patients with heart disease.</p>  |
| <p>The patient taking topiramate (Topamax) for prophylactic treatment of migraine headache should be instructed to (select all that apply)</p> <p>A. not abruptly discontinue the drug.<br/>B. maintain adequate fluid intake.<br/>C. take the medication with food.<br/>D. avoid physical activities that cause exertion.<br/>E. discontinue the drug if it is ineffective after two weeks.</p>  | <p>A,B<br/>Instruct patient to not abruptly discontinue as this may cause seizures and take adequate fluid intake to decrease risk of renal stone development. Topiramate must be used for 2 to 3 months to determine its effectiveness.</p>   |
| <p>During the nursing assessment the patient states that he has been experiencing headaches that last for weeks to months at a time and then go into remission. These signs and symptoms are consistent with which type of headache?</p> <p>A. Sinus<br/>B. Cluster<br/>C. Tension<br/>D. Migraine</p>  | <p>B<br/>Cluster headaches are a rare form of headache, affecting less than 0.1% of the population. Cluster headaches involve repeated headaches that can occur for weeks to months at a time, followed by periods of remission.</p>   |
| <p>he nursing student would be correct in identifying that the pain of a cluster headache is characterized as</p> <p>A. dull and heavy.<br/>B. sharp and stabbing.<br/>C. preceded by an aura.<br/>D. worsened by light.</p>  | <p>B<br/>The pain of cluster headache is sharp and stabbing, which is in contrast to the pulsing pain of the migraine headache.</p>  |
| <p>What would you include in your teaching about a dietary trigger of a cluster headache?</p> <p>A. Aged cheese<br/>B. Alcohol<br/>C. Caffeine<br/>D. Grapefruit</p>  | <p>B<br/>Alcohol is the only dietary trigger of cluster headaches.</p>   |
| <p>You would expect the health care provider to order which of the following as the initial treatment for acute cluster headache?</p> <p>A. Ice cap for 30 minutes, four times a day<br/>B. 100% oxygen delivered at a rate of 6-8 L/min for 10 minutes<br/>C. Aspirin<br/>D. Indomethacin</p>  | <p>B<br/>Acute treatment of cluster headache is inhalation of 100% oxygen delivered at a rate of 6-8 L/min for 10 minutes, which may relieve headache by causing vasoconstriction and increasing synthesis of serotonin in the central nervous system. It can be repeated after a 5-minute rest.</p> |

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| <p>The aim of biofeedback in the patient who experiences headaches is to</p> <p>A. relax muscles and increase peripheral blood flow.<br/>         B. raise the blood pressure.<br/>         C. decrease the pulse rate.<br/>         D. relax the diaphragm and increase the oxygen saturation.</p>  | <p>A<br/>         Biofeedback involves the use of physiologic monitoring equipment to give the patient information regarding muscle tension and peripheral blood flow (e.g., skin temperature of the fingers). The patient is trained to relax the muscles and raise the finger temperature, and is given reinforcement (operant conditioning) in accomplishing these changes.</p>  |
| <p>Treatment of medication overuse headache is</p> <p>A. use of an ice cap.<br/>         B. skeletal muscle relaxants.<br/>         C. elimination of caffeinated beverages.<br/>         D. abrupt withdrawal of all nonopioid medications.</p>   | <p>D<br/>         Medication overuse headache (MOH) is the term used to describe an analgesic rebound headache. Drugs known to cause this problem are acetaminophen, aspirin, NSAIDs (e.g., ibuprofen), butalbital, sumatriptan, and opioids. Treatment involves abrupt withdrawal of the offending drug (except for opioids, which need to be tapered) and initiation of alternative drugs such as amitriptyline.</p>  |
| <p>A 50-year-old man complains of recurring headaches. He describes these as sharp, stabbing, and located around his left eye. He also reports that his left eye seems to swell and get teary when these headaches occur. Based on this history, you suspect that he has</p> <p>A. cluster headaches.<br/>         B. tension headaches.<br/>         C. migraine headaches.<br/>         D. medication overuse headaches.</p> | <p>A<br/>         Cluster headaches involve repeated headaches that can occur for weeks to months at a time, followed by periods of remission. The pain of cluster headache is sharp and stabbing; the intense pain lasts from a few minutes to 3 hours. Headaches can occur every other day and as often as 8 times a day. The clusters occur with regularity, usually occurring at the same time each day, during the same seasons of the year. Typically a cluster lasts 2 weeks to 3 months, and then the patient goes into remission for months to years. The pain is generally located around the eye, radiating to the temple, forehead, cheek, nose, or gums. Other manifestations may include swelling around the eye, lacrimation (tearing), facial flushing or pallor, nasal congestion, and constriction of the pupil. During the headache, the patient is often agitated and restless, unable to sit still or relax.</p> |
| <p>You are called to the patient's room and find the patient in a clonic reaction. Your priority action is to</p> <p>A. record the time sequence of all of the patient's movements and responses as they occur.<br/>         B. turn the patient to the side.<br/>         C. call the health care provider.<br/>         D. start oxygen by mask at 6 L/miN</p>   | <p>A<br/>         When a seizure occurs, you should carefully observe and record details of the event because the diagnosis and subsequent treatment often rest solely on the seizure description. All aspects of the seizure should be noted. What events preceded the seizure? When did the seizure occur? How long did each phase (aural [if any], ictal, postictal) last?</p>   |
| <p>You would correctly identify which age group as most often affected by absence seizures?</p> <p>A. Infants<br/>         B. Children<br/>         C. Young adults<br/>         D. Older adults</p>   | <p>The absence (petit mal) seizure usually occurs only in children and rarely continues beyond adolescence. This type of seizure may cease altogether as the child matures, or it may evolve into another type of seizure.</p>  |
| <p>Which characteristic of a patient's recent seizure indicates a partial seizure?</p> <p>A. The patient lost consciousness during the seizure.<br/>         B. The seizure involved lipsmacking and repetitive movements.<br/>         C. The patient fell to the ground and became stiff for 20 seconds.<br/>         D. The etiology of the seizure involved both sides of the patient's brain.</p>                         | <p>B<br/>         The most common complex partial seizure involves lip smacking and automatisms (repetitive movements that may not be appropriate). Loss of consciousness, bilateral brain involvement, and a tonic phase are associated with generalized seizure activity.</p>   |
| <p>The patient has been receiving scheduled doses of phenytoin (Dilantin) and begins to experience diplopia. You immediately assess the patient for</p> <p>A. an aura.<br/>         B. nystagmus or confusion.<br/>         C. abdominal pain or cramping.<br/>         D. irregular pulse or palpitations</p>   | <p>B<br/>         Diplopia is a sign of phenytoin toxicity. You should assess for other signs of toxicity, which include neurologic changes such as nystagmus, ataxia, confusion, dizziness, or slurred speech.</p>   |

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| <p>The patient has an order for phenytoin (Dilantin) 100 mg q8hr IV. Available is a phenytoin injection containing 50 mg/mL. How many milliliters of solution should you draw up for the dose?</p> <p>A. 0.5<br/>B. 2<br/>C. 5<br/>D. 20</p>   | <p>B<br/>100 mg ÷ 50 mg/mL = 2 mL.</p>   |
| <p>The nursing student reports to the nurse in charge that the patient experienced a generalized tonic-clonic seizure. This means that the patient is exhibiting</p> <p>A. a momentary loss of consciousness.<br/>B. jerking movements throughout the body.<br/>C. rigidity for several seconds, then flaccidity.<br/>D. rigidity of muscles followed by muscle jerking.</p>   | <p>D<br/>The most common generalized seizure is the generalized tonic-clonic (formerly known as grand mal) seizure. Tonic-clonic seizure is characterized by loss of consciousness and falling to the ground if the patient is upright, followed by stiffening of the body (tonic phase) for 10 to 20 seconds and subsequent jerking of the extremities (clonic phase) for another 30 to 40 seconds</p>  |
| <p>During the postictal period of a seizure, you would expect the patient to</p> <p>A. demonstrate minor jerking and eye fluttering.<br/>B. sleep for several hours.<br/>C. be incontinent of urine and feces.<br/>D. require ventilator assistance.</p>   | <p>B<br/>In the postictal phase the patient usually has muscle soreness, is very tired, and may sleep for several hours. Some patients may not feel normal for several hours or days after a seizure. The patient has no memory of the seizure.</p>  |
| <p>A classic sign of an absence (petit mal) seizure is</p> <p>A. blank stare.<br/>B. frequent smacking of lips.<br/>C. urinary incontinence.<br/>D. asking the same question over and over.</p>  | <p>A<br/>The typical clinical manifestation is a brief staring spell that lasts only a few seconds, so it often occurs unnoticed. There may be an extremely brief loss of consciousness.</p>   |
| <p>How do you recognize that status epilepticus is a medical emergency because</p> <p>A. seizures continue without a return of consciousness.<br/>B. fractures of a limb may occur.<br/>C. urinary fecal incontinence may occur.<br/>D. heart rate becomes bradycardic.</p>  | <p>A<br/>Status epilepticus is a state of continuous seizure activity or a condition in which seizures recur in rapid succession without return to consciousness between seizures. It is the most serious complication of epilepsy and is a neurologic emergency. Status epilepticus can occur due to any type of seizure. During repeated seizures the brain uses more energy than can be supplied.</p> |
| <p>The patient is seen in the clinic due to an increase in the frequency of seizure activity. In addition to a thorough health history you should draw blood for</p> <p>A. anemia.<br/>B. serum drug levels.<br/>C. arterial blood gases.<br/>D. electrolytes.</p>   | <p>B<br/>Serum levels of the drug should be monitored if seizures continue to occur, if seizure frequency increases, or if drug compliance is questioned. The therapeutic range for each drug indicates the serum level above which most patients experience toxic side effects and below which most continue to have seizures. R</p>  |
| <p>Treatment of status epilepticus requires initiation of a rapid-acting antiseizure drug that can be given intravenously. You would anticipate which drugs to be administered (select all that apply)?</p> <p>A. phenytoin (Dilantin)<br/>B. phenobarbital<br/>C. lorazepam (Ativan)<br/>D. diazepam (Valium)<br/>E. carbamazepine (Tegretol)</p>   | <p>C,D<br/>Treatment of status epilepticus requires initiation of a rapid-acting antiseizure drug that can be given intravenously. The drugs most commonly used are lorazepam (Ativan) and diazepam (Valium).</p>  |
| <p>Which measure should you prioritize when providing care for a patient with a diagnosis of multiple sclerosis (MS)?</p> <p>A. Vigilant infection control and adherence to standard precautions<br/>B. Careful monitoring of neurologic vital signs and frequent reorientation<br/>C. Maintenance of a calorie count and hourly assessment of intake and output<br/>D. Assessment of blood pressure and monitoring for signs of orthostatic hypotension</p> | <p>A<br/>Infection control is a priority in the care of patients with MS since infection is the most common precipitator of an exacerbation of the disease. Decreases in cognitive function are less likely and MS does not typically result in hypotension or fluid volume excess or deficit.</p>   |
| <p>The pathophysiology of multiple sclerosis (MS) is related to an attack on the</p>   | <p>A<br/>Initially the myelin sheaths of the neurons in the brain and spinal</p>   |

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| <p>A. myelin sheaths on various neurons.<br/>         B. goblet cells of the muscles.<br/>         C. lining of the blood vessels.<br/>         D. lack of acetylcholine at the synaptic junction.</p>  | <p>cord are attacked. Early in the disease the myelin sheath is damaged.</p>  |
| <p>A young woman has been diagnosed with relapsing-remitting multiple sclerosis and interferon <math>\beta</math> (Betaseron) has been prescribed. You determine that teaching about the drug has been successful when the patient says (select all that apply)</p> <p>A. "I should avoid direct sunlight and use sunscreen and protective clothing when out of doors."<br/>         B. "I will need to rotate injection sites with each dose I inject."<br/>         C. "I should report any depression or suicidal thoughts that develop."<br/>         D. "Because this drug is a corticosteroid, I should reduce my sodium intake to prevent edema."<br/>         E. "Flulike symptoms are indicative of a significant side effect and should be reported immediately."</p> | <p>A,B,C<br/>         Interferon is an immunomodulator, not a corticosteroid. The patient should rotate injection sites with each dose and the patient should watch for depression and suicidal ideation. The patient should wear sunscreen and protective clothing while exposed to sun. The patient should also be aware that flu-like symptoms are common following initiation of therapy.</p>   |
| <p>You know that dietary teaching has been effective when the patient with multiple sclerosis makes which meal choice?</p> <p>A. Hamburger, fries, vanilla shake<br/>         B. Steak, scalloped potatoes, French toast, iced tea<br/>         C. Ham sandwich, potato chips, glass of whole milk<br/>         D. Salad with tomatoes, chicken, bran muffin, strawberries, low-fat milk</p>  | <p>D<br/>         A nutritious, well-balanced diet is essential. Although there is no standard prescribed diet, a high-protein diet with supplementary vitamins is often recommended. A diet high in roughage may help relieve the problem of constipation.</p>   |
| <p>Which gastrointestinal complication would you expect in the patient with multiple sclerosis?</p> <p>A. Diarrhea<br/>         B. Bowel obstruction<br/>         C. Constipation<br/>         D. Rectal prolapse</p>   | <p>C<br/>         Problems with defecation usually involve constipation rather than fecal incontinence.</p>   |
| <p>A male patient with a diagnosis of Parkinson's disease (PD) has been recently admitted to a long-term care facility. Which action should the health care team take in order to promote adequate nutrition for this patient?</p> <p>A. Provide multivitamins with each meal.<br/>         B. Provide a diet that is low in complex carbohydrates and high in protein.<br/>         C. Provide small, frequent meals throughout the day that are easy to chew and swallow.<br/>         D. Provide the patient with a minced or pureed diet that is high in potassium and low in sodium.</p>   | <p>C<br/>         Nutritional support is a priority in the care of individuals with PD. Such patients may benefit from meals that are smaller and more frequent than normal and which are easy to chew and swallow. Multivitamins are not necessary at each meal, and vitamin intake, along with protein intake, must be monitored to prevent contraindications with medications. It is likely premature to introduce a minced or pureed diet and a low carbohydrate diet is not indicated.</p> |
| <p>What is the cause of the clinical manifestations of Parkinson's disease?</p> <p>A. Decreased levels of dopamine<br/>         B. Decreased levels of acetylcholine<br/>         C. Increased levels of angiotensinogen<br/>         D. Increased levels of relaxin</p>  | <p>A<br/>         The pathologic process of PD involves degeneration of the dopamine-producing neurons in the substantia nigra of the mid-brain.</p>  |
| <p>The classic symptoms of Parkinson's disease include (select all that apply)</p> <p>A. tremor.<br/>         B. rigidity.<br/>         C. loss of balance.<br/>         D. bradykinesia.<br/>         E. nystagmus.</p>  | <p>A,B,D<br/>         The classic manifestations of PD often include tremor, rigidity, and bradykinesia, which are often called the triad of PD.</p>  |
| <p>The patient asks you, "How can I be certain I have Parkinson's disease?" Your response is based on the knowledge that the absolute confirmation of the diagnosis is</p> <p>A. decreased serum dopamine level.<br/>         B. positive response to medication administration.</p>  | <p>B<br/>         The ultimate confirmation of PD is a positive response to antiparkinsonian drugs.</p>   |

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| <p>C. nerve biopsy.<br/>D. electromyography (EMG).</p>   |   |
| <p>The patient with Parkinson's disease is beginning therapy with carbidopa/levodopa (Sinemet). What teaching should you provide to this patient?</p> <p>A. The medication should be taken every other day.<br/>B. It may take several weeks for effects to be observed.<br/>C. Side effects are limited to rash and photophobia.<br/>D. Constipation may occur.</p>     | <p>B<br/>Effects of carbidopa/levodopa (Sinemet) may be delayed for several weeks to months.</p>  |
| <p>Which nursing diagnosis is more appropriate for a patient with advanced Parkinson's disease?</p> <p>A. Urinary urge incontinence related to effects of drug therapy<br/>B. Ineffective breathing pattern related to diaphragm fatigue<br/>C. Risk for aspiration related to impaired swallowing<br/>D. Risk for injury related to limited vision</p>                  | <p>C</p>  |
| <p>You would correctly identify the advantage of Sinemet in the treatment of Parkinson's disease is its ability to</p> <p>A. restore deficient dopamine.<br/>B. increase the effect of levodopa.<br/>C. block the breakdown of dopamine.<br/>D. block uptake of catecholamines.</p>  | <p>A<br/>Sinemet is the preferred drug because it also contains carbidopa, an agent that inhibits the enzyme dopa-decarboxylase in the peripheral tissues. Dopa-decarboxylase breaks down levodopa before it reaches the brain. The net result of the combination of levodopa and carbidopa is that more levodopa reaches the brain, and therefore less drug is needed.</p> |
| <p>A 65-year-old woman was just diagnosed with Parkinson's disease. The priority nursing intervention is</p> <p>A. searching the Internet for educational videos.<br/>B. evaluating the home for environmental safety.<br/>C. promoting physical exercise and a well-balanced diet.<br/>D. designing an exercise program to strengthen and stretch specific muscles.</p> | <p>C<br/>Promotion of physical exercise and a well-balanced diet are major concerns for nursing care for patients with Parkinson's disease.</p>   |
| <p>You would correctly identify the pathophysiologic etiology of myasthenia gravis as a deficit of</p> <p>A. dopamine.<br/>B. acetylcholine.<br/>C. myelin.<br/>D. albumin.</p>  | <p>B<br/>MG is caused by an autoimmune process in which antibodies attack acetylcholine (ACh) receptors, resulting in a decreased number of ACh receptor (AChR) sites at the neuromuscular junction. This prevents ACh molecules from attaching and stimulating muscle contraction.</p>   |
| <p>Which nursing diagnosis is likely to be a priority in the care of a patient with myasthenia gravis?</p> <p>A. Acute confusion<br/>B. Bowel incontinence<br/>C. Activity intolerance<br/>D. Disturbed sleep pattern</p>  | <p>C<br/>The primary feature of MG is fluctuating weakness of skeletal muscle. Bowel incontinence and confusion are unlikely signs of MG, and while sleep disturbance is likely, activity intolerance is usually of primary concern.</p>  |
| <p>You would correctly identify that the most common early symptom(s) of myasthenia gravis are</p> <p>A. weakness, fatigue, and ptosis.<br/>B. significant unilateral weakness.<br/>C. nausea, dizziness, and dysphagia.<br/>D. numbness and tingling of the extremities.</p>  | <p>A<br/>The primary feature of MG is fluctuating weakness of skeletal muscle. Strength is usually restored after a period of rest. The muscles most often involved are those used for moving the eyes and eyelids, chewing, swallowing, speaking, and breathing.</p>   |
| <p>When administering a Tensilon test to a patient with a possible diagnosis of myasthenia gravis, you would realize the test is positive if the patient</p> <p>A. reports improved muscle strength.<br/>B. demonstrates improved cognition.<br/>C. experiences a surge of energy.<br/>D. exhibits enhanced vision.</p>  | <p>A<br/>Tensilon test in a patient with MG reveals improved muscle contractility after intravenous injection of the anticholinesterase agent edrophonium chloride (Tensilon). (Anticholinesterase blocks the enzyme acetylcholinesterase.)</p>   |
| <p>The priority nursing intervention for the patient with myasthenia gravis who is receiving pyridostigmine (Mestinon) includes</p> <p>A. timing drug administration so that chewing and swallowing are</p>  |   |

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| <p>enhanced.</p> <p>B. withholding the drug if muscle function improves.</p> <p>C. assessing for constipation and paralytic ileus.</p> <p>D. monitoring renal and hepatic function.</p>  | <p>A</p> <p>Scheduling doses of drugs so that peak action is reached at mealtime may make eating less difficult.</p>   |
| <p>A patient has ptosis secondary to myasthenia gravis. Which assessment finding would you expect to see in this patient?</p> <p>A. Redness and swelling of the conjunctiva</p> <p>B. Drooping of the upper lid margin in one or both eyes</p> <p>C. Redness, swelling, and crusting along the lid margins</p> <p>D. Small, superficial white nodules along the lid margin</p>   | <p>B</p> <p>Ptosis is the term used to describe drooping of the upper lid margin, which may be either unilateral or bilateral. Ptosis can be a result of mechanical causes, such as an eyelid tumor or excess skin, or from myogenic causes such as myasthenia gravis.</p>   |
| <p>Which statement is true regarding the prevalence of restless legs syndrome?</p> <p>A. Rates are great than 50%.</p> <p>B. Rates are lowest in the Asian population.</p> <p>C. Rates are higher in males than females.</p> <p>D. Rates are highest in the age group of 20 to 30 year olds.</p>   | <p>B</p> <p>Restless legs syndrome (RLS) is a relatively common condition characterized by unpleasant sensory (paresthesias) and motor abnormalities of one or both legs. Prevalence rates vary from 5% to 15%. However, the prevalence may be higher because the condition is underdiagnosed. The prevalence of RLS is lower in Asian populations, and RLS is more common in older adults. It is more common in women than men, and women may have an earlier age of onset.</p>   |
| <p>The patient relates to you that the health care provider suggested the patient may be diagnosed with restless legs syndrome (RLS). The patient asks you about the initial symptoms of RLS. You would identify which of the following as initial manifestation(s) of RLS?</p> <p>A. Numbness and tingling in the legs</p> <p>B. Periodic inability to control leg movements</p> <p>C. Cramp-like pain in the thighs</p> <p>D. Redness of the lower legs.</p>   | <p>A</p> <p>The severity of RLS sensory symptoms ranges from infrequent minor discomfort (paresthesias, including numbness, tingling, and "pins and needles" sensation) to severe pain. Sensory symptoms often appear first and are manifested as an annoying and uncomfortable (but usually not painful) sensation in the legs. The sensation is often compared with the sensation of bugs creeping or crawling on the legs.</p>  |
| <p>A priority goal for the patient with restless legs syndrome is to</p> <p>A. increase exercise and activity throughout the day time.</p> <p>B. improve sleep quality.</p> <p>C. promote weight loss.</p> <p>D. increase nighttime consumption warm beverages.</p>  | <p>B</p> <p>he goal of collaborative management is to reduce patient discomfort and distress and to improve sleep quality.</p>   |
| <p>You would expect the patient with restless legs syndrome to identify the discomfort or pain to present</p> <p>A. within the first 30 minutes after getting out of bed in the morning.</p> <p>B. after vigorous exercise.</p> <p>C. when sedentary.</p> <p>D. during a shower or bath.</p>   | <p>C</p> <p>The discomfort occurs when the patient is sedentary and is most common in the evening or at night.</p>   |
| <p>The primary goal for the treatment of restless legs syndrome is to</p> <p>A. reduce episodes.</p> <p>B. improve sleep quality.</p> <p>C. increase exercise tolerance.</p> <p>D. increase iron stores.</p>   | <p>The goal of collaborative management is to reduce patient discomfort and distress and to improve sleep quality. When RLS is secondary to renal failure or iron deficiency, correction of these conditions will decrease symptoms.</p>   |
| <p>You assess that an 87-year-old woman with Alzheimer's disease is continually rubbing, flexing, and kicking out her legs throughout the day. The night shift reports that this same behavior escalates at night, preventing her from obtaining her required sleep. The next step the nurse should take is to</p> <p>A. ask the physician for a daytime sedative for the patient.</p> <p>B. request soft restraints to prevent her from falling out of her bed.</p> <p>C. ask the physician for a nighttime sleep medication for the patient.</p> <p>D. assess the patient more closely, suspecting a disorder such as restless legs syndrome</p> | <p>D</p> <p>The severity of restless legs syndrome (RLS) sensory symptoms ranges from infrequent minor discomfort (paresthesias, including numbness, tingling, and "pins and needles" sensation) to severe pain. The discomfort occurs when the patient is sedentary and is most common in the evening or at night. The pain at night can produce sleep disruptions and is often relieved by physical activity such as walking, stretching, rocking, or kicking. In the most severe cases, patients sleep only a few hours at night, resulting in daytime fatigue and disruption of the daily routine. The motor abnormalities associated with RLS consist of voluntary restlessness and stereotyped, periodic, involuntary movements. The involuntary movements usually occur during sleep. Symptoms are aggravated by fatigue.</p> |

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| <p>Which statement is true regarding the prevalence of amyotrophic lateral sclerosis (ALS)?</p> <p>A. Death occurs in less than one year<br/> B. Survival rate is less than two years<br/> C. Rates are higher in males than females<br/> D. Rates are highest in the age group of 20 to 30 year olds</p>  | <p>C<br/> Amyotrophic lateral sclerosis (ALS) is a rare progressive neuro-logic disorder characterized by loss of motor neurons. ALS usually leads to death within 2 to 6 years after diagnosis, but many patients may survive for more than 10 years. The onset is usually between 40 and 70 years of age. ALS is more common in men than women by a ratio of 2:1.</p>         |
| <p>An important nursing diagnosis for the patient with amyotrophic lateral (ALS) is</p> <p>A. impaired gas exchange related to paralysis of respiratory muscles.<br/> B. hypothermia related to impaired regulation by the hypothalamus.<br/> C. impaired memory related to cognitive changes.<br/> D. dysreflexia related to loss of sympathetic nervous tone</p>   | <p>A<br/> Death usually results from respiratory infection secondary to compromised respiratory function</p>  |
| <p>When working with the family of a patient with amyotrophic lateral sclerosis (ALS) in the later stages of the disease, what teaching should you reinforce?</p> <p>A. Perform frequent passive range of motion to maintain joint function.<br/> B. Communicate with patient normally because cognition remains intact.<br/> C. Provide foods high in fiber to prevent constipation.<br/> D. Speak in a loud clear voice to facilitate the patient's hearing.</p> | <p>B<br/> The illness trajectory for ALS is devastating because the patient remains cognitively intact while wasting away. Active range of motion is needed to maintain muscle function. Foods high in fiber may be difficult to chew. Patients with ALS usually do not have a hearing impairment.</p>  |
| <p>Social effects of a chronic neurologic disease include (select all that apply)</p> <p>A. divorce.<br/> B. job loss.<br/> C. depression.<br/> D. role changes.<br/> E. loss of self-esteem.</p>  | <p>ALL OF THEM<br/> Social problems related to chronic neurologic disease may include changes in roles and relationships (such as divorce, job loss, and role changes); other psychologic problems (such as depression and loss of self-esteem) may also have social effects.</p>   |
| <p>You are counseling the family of a patient with Huntington's disease (HD) about the genetics involved in the disease. You would be correct in informing the family that the genetic risk for manifestation of the disease in genetic transmission is</p> <p>A. 1 in every 4 pregnancies.<br/> B. 1 in every 2 pregnancies.<br/> C. only evident in male children.<br/> D. impossible to predict.</p>  | <p>B<br/> HD is a genetically transmitted, autosomal dominant disorder that affects both men and women of all races. The offspring of a person with this disease have a 50% risk of inheriting it.</p>  |
| <p>Which statement is true regarding the prevalence of Huntington's disease?</p> <p>A. Death occurs in less than one year.<br/> B. Survival rate is less than two years.<br/> C. Rates are higher in males than females.<br/> D. Onset occurs in the 30 to 50 year old age group.</p>  | <p>D<br/> The onset of HD is usually between 30 and 50 years of age. HD is a genetically transmitted, autosomal dominant disorder that affects both men and women of all races. Death usually occurs 10 to 20 years after the onset of symptoms.</p>  |
| <p>You know the pathologic process of Huntington's disease (HD) involves a deficiency of</p> <p>A. acetylcholine.<br/> B. dopamine.<br/> C. serotonin.<br/> D. endorphins.</p>   | <p>A<br/> The pathologic process of HD involves the basal ganglia and the extrapyramidal motor system. However, instead of a deficiency of dopamine, HD involves a deficiency of the neurotransmitters acetylcholine and <math>\gamma</math>-aminobutyric acid (GABA).</p>  |
| <p>One major goal of treatment for the patient with Huntington's disease is</p> <p>A. disease cure.<br/> B. symptomatic relief.<br/> C. maintaining employment.<br/> D. improving muscle strength.</p>   | <p>B<br/> Because there is no cure for Huntington's disease (HD), collaborative care is palliative and based on symptom relief. The goal of nursing management is to provide the most comfortable environment possible for the patient and the caregiver by maintaining physical safety, treating the physical symptoms, and providing emotional and psychological support.</p> |

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| <p>A client admitted to the hospital with a subarachnoid hemorrhage has complaints of severe headache, nuchal rigidity, and projectile vomiting. The nurse knows lumbar puncture (LP) would be contraindicated in this client in which of the following circumstances?</p> <ol style="list-style-type: none"> <li>1. Vomiting continues</li> <li>2. Intracranial pressure (ICP) is increased</li> <li>3. The client needs mechanical ventilation</li> <li>4. Blood is anticipated in the cerebrospinal fluid (CSF)</li> </ol> | <p>2<br/>Sudden removal of CSF results in pressures lower in the lumbar area than the brain and favors herniation of the brain; therefore, LP is contraindicated with increased ICP. Vomiting may be caused by reasons other than increased ICP; therefore, LP isn't strictly contraindicated. An LP may be preformed on clients needing mechanical ventilation. Blood in the CSF is diagnostic for subarachnoid hemorrhage and was obtained before signs and symptoms of ICP.</p> |
| <p>A client with a subdural hematoma becomes restless and confused, with dilation of the ipsilateral pupil. The physician orders mannitol for which of the following reasons?</p> <ol style="list-style-type: none"> <li>1. To reduce intraocular pressure</li> <li>2. To prevent acute tubular necrosis</li> <li>3. To promote osmotic diuresis to decrease ICP</li> <li>4. To draw water into the vascular system to increase blood pressure</li> </ol>   | <p>3<br/>Mannitol promotes osmotic diuresis by increasing the pressure gradient, drawing fluid from intracellular to intravascular spaces. Although mannitol is used for all the reasons described, the reduction of ICP in this client is a concern.</p>  |
| <p>A client with subdural hematoma was given mannitol to decrease intracranial pressure (ICP). Which of the following results would best show the mannitol was effective?</p> <ol style="list-style-type: none"> <li>1. Urine output increases</li> <li>2. Pupils are 8 mm and nonreactive</li> <li>3. Systolic blood pressure remains at 150 mm Hg</li> <li>4. BUN and creatinine levels return to normal</li> </ol>   | <p>1<br/>Mannitol promotes osmotic diuresis by increasing the pressure gradient in the renal tubes. Fixed and dilated pupils are symptoms of increased ICP or cranial nerve damage. No information is given about abnormal BUN and creatinine levels or that mannitol is being given for renal dysfunction or blood pressure maintenance.</p>  |
| <p>Which of the following values is considered normal for ICP?</p> <ol style="list-style-type: none"> <li>1. 0 to 15 mm Hg</li> <li>2. 25 mm Hg</li> <li>3. 35 to 45 mm Hg</li> <li>4. 120/80 mm Hg</li> </ol>  | <p>1<br/>Normal ICP is 0-15 mm Hg.</p>   |
| <p>Which of the following symptoms may occur with a phenytoin level of 32 mg/dl?</p> <ol style="list-style-type: none"> <li>1. Ataxia and confusion</li> <li>2. Sodium depletion</li> <li>3. Tonic-clonic seizure</li> <li>4. Urinary incontinence</li> </ol>   | <p>1. A therapeutic phenytoin level is 10 to 20 mg/dl. A level of 32 mg/dl indicates toxicity. Symptoms of toxicity include confusion and ataxia. Phenytoin doesn't cause hyponatremia, seizure, or urinary incontinence. Incontinence may occur during or after a seizure.</p>  |
| <p>Which of the following signs and symptoms of increased ICP after head trauma would appear first?</p> <ol style="list-style-type: none"> <li>1. Bradycardia</li> <li>2. Large amounts of very dilute urine</li> <li>3. Restlessness and confusion</li> <li>4. Widened pulse pressure</li> </ol>   | <p>3<br/>The earliest symptom of elevated ICP is a change in mental status. Bradycardia, widened pulse pressure, and bradypnea occur later. The client may void large amounts of very dilute urine if there's damage to the posterior pituitary.</p>   |
| <p>Problems with memory and learning would relate to which of the following lobes?</p> <ol style="list-style-type: none"> <li>1. Frontal</li> <li>2. Occipital</li> <li>3. Parietal</li> <li>4. Temporal</li> </ol>   | <p>4<br/>The temporal lobe functions to regulate memory and learning problems because of the integration of the hippocampus. The frontal lobe primarily functions to regulate thinking, planning, and judgment. The occipital lobe functions regulate vision. The parietal lobe primarily functions with sensory function.</p>   |
| <p>While cooking, your client couldn't feel the temperature of a hot oven. Which lobe could be dysfunctional?</p> <ol style="list-style-type: none"> <li>1. Frontal</li> <li>2. Occipital</li> <li>3. Parietal</li> <li>4. Temporal</li> </ol>  | <p>3 The parietal lobe regulates sensory function, which would include the ability to sense hot or cold objects. The frontal lobe regulates thinking, planning, and judgment, and the occipital lobe is primarily responsible for vision function. The temporal lobe regulates memory.</p>   |
| <p>The nurse is assessing the motor function of an unconscious client. The nurse would plan to use which of the following to test the client's peripheral response to pain?</p> <ol style="list-style-type: none"> <li>1. Sternal rub</li> <li>2. Pressure on the orbital rim</li> </ol>  | <p>4<br/>Motor testing on the unconscious client can be done only by testing response to painful stimuli. Nailbed pressure tests a basic peripheral response. Cerebral responses to pain are testing using sternal rub, placing upward pressure on the orbital rim, or squeezing the clavicle or sternocleidomastoid muscle.</p>   |

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| <p>3. Squeezing the sternocleidomastoid muscle<br/>4. Nail bed pressure</p>  |  |
| <p>The client is having a lumbar puncture performed. The nurse would plan to place the client in which position for the procedure?</p> <ol style="list-style-type: none"> <li>1. Side-lying, with legs pulled up and head bent down onto the chest</li> <li>2. Side-lying, with a pillow under the hip</li> <li>3. Prone, in a slight Trendelenburg's position</li> <li>4. Prone, with a pillow under the abdomen.</li> </ol>  | <p>1<br/>The client undergoing lumbar puncture is positioned lying on the side, with the legs pulled up to the abdomen, and with the head bent down onto the chest. This position helps to open the spaces between the vertebrae.</p>  |
| <p>A nurse is assisting with caloric testing of the oculovestibular reflex of an unconscious client. Cold water is injected into the left auditory canal. The client exhibits eye conjugate movements toward the left followed by a rapid nystagmus toward the right. The nurse understands that this indicates the client has:</p> <ol style="list-style-type: none"> <li>1. A cerebral lesion</li> <li>2. A temporal lesion</li> <li>3. An intact brainstem</li> <li>4. Brain death</li> </ol>   | <p>3<br/>Caloric testing provides information about differentiating between cerebellar and brainstem lesions. After determining patency of the ear canal, cold or warm water is injected in the auditory canal. A normal response that indicates intact function of cranial nerves III, IV, and VIII is conjugate eye movements toward the side being irrigated, followed by rapid nystagmus to the opposite side. Absent or dysconjugate eye movements indicate brainstem damage.</p>   |
| <p>The nurse is caring for the client with increased intracranial pressure. The nurse would note which of the following trends in vital signs if the ICP is rising?</p> <ol style="list-style-type: none"> <li>1. Increasing temperature, increasing pulse, increasing respirations, decreasing blood pressure.</li> <li>2. Increasing temperature, decreasing pulse, decreasing respirations, increasing blood pressure.</li> <li>3. Decreasing temperature, decreasing pulse, increasing respirations, decreasing blood pressure.</li> <li>4. Decreasing temperature, increasing pulse, decreasing respirations, increasing blood pressure.</li> </ol> | <p>2<br/>A change in vital signs may be a late sign of increased intracranial pressure. Trends include increasing temperature and blood pressure and decreasing pulse and respirations. Respiratory irregularities also may arise.</p>   |
| <p>The nurse is evaluating the status of a client who had a craniotomy 3 days ago. The nurse would suspect the client is developing meningitis as a complication of surgery if the client exhibits:</p> <ol style="list-style-type: none"> <li>1. A positive Brudzinski's sign</li> <li>2. A negative Kernig's sign</li> <li>3. Absence of nuchal rigidity</li> <li>4. A Glasgow Coma Scale score of 15</li> </ol>   | <p>1<br/>Signs of meningeal irritation compatible with meningitis include nuchal rigidity, positive Brudzinski's sign, and positive Kernig's sign. Nuchal rigidity is characterized by a stiff neck and soreness, which is especially noticeable when the neck is fixed. Kernig's sign is positive when the client feels pain and spasm of the hamstring muscles when the knee and thigh are extended from a flexed-right angle position. Brudzinski's sign is positive when the client flexes the hips and knees in response to the nurse gently flexing the head and neck onto the chest. A Glasgow Coma Scale of 15 is a perfect score and indicates the client is awake and alert with no neurological deficits.</p> |
| <p>A client is arousing from a coma and keeps saying, "Just stop the pain." The nurse responds based on the knowledge that the human body typically and automatically responds to pain first with attempts to:</p> <ol style="list-style-type: none"> <li>1. Tolerate the pain</li> <li>2. Decrease the perception of pain</li> <li>3. Escape the source of pain</li> <li>4. Divert attention from the source of pain.</li> </ol>  | <p>3<br/>The client's innate responses to pain are directed initially toward escaping from the source of pain. Variations in individuals' tolerance and perception of pain are apparent only in conscious clients, and only conscious clients are able to employ distraction to help relieve pain.</p>   |
| <p>During the acute stage of meningitis, a 3-year-old child is restless and irritable. Which of the following would be most appropriate to institute?</p> <ol style="list-style-type: none"> <li>1. Limiting conversation with the child</li> <li>2. Keeping extraneous noise to a minimum</li> <li>3. Allowing the child to play in the bathtub</li> <li>4. Performing treatments quickly</li> </ol>  | <p>2<br/>A child in the acute stage of meningitis is irritable and hypersensitive to loud noise and light. Therefore, extraneous noise should be minimized and bright lights avoided as much as possible. There is no need to limit conversations with the child. However, the nurse should speak in a calm, gentle, reassuring voice. The child needs gentle and calm bathing. Because of the acuteness of the infection, sponge baths would be more appropriate than tub baths. Although treatments need to be completed as quickly as possible to prevent overstressing the child, any treatments should be performed carefully and at a pace that avoids sudden movements to</p>                                     |

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|   | prevent startling the child and subsequently increasing intracranial pressure.   |
| Which of the following would lead the nurse to suspect that a child with meningitis has developed disseminated intravascular coagulation?<br>1. Hemorrhagic skin rash<br>2. Edema<br>3. Cyanosis<br>4. Dyspnea on exertion  | 1<br>DIC is characterized by skin petechiae and a purpuric skin rash caused by spontaneous bleeding into the tissues. An abnormal coagulation phenomenon causes the condition.   |
| When interviewing the parents of a 2-year-old child, a history of which of the following illnesses would lead the nurse to suspect pneumococcal meningitis?<br>1. Bladder infection<br>2. Middle ear infection<br>3. Fractured clavicle<br>4. Septic arthritis  | 2<br>Organisms that cause bacterial meningitis, such as pneumococci or meningococci, are commonly spread in the body by vascular dissemination from a middle ear infection. The meningitis may also be a direct extension from the paranasal and mastoid sinuses. The causative organism is a pneumonococcus. A chronically draining ear is frequently also found. |
| The nurse is assessing a child diagnosed with a brain tumor. Which of the following signs and symptoms would the nurse expect the child to demonstrate? Select all that apply.<br>1. Head tilt<br>2. Vomiting<br>3. Polydipsia<br>4. Lethargy<br>5. Increased appetite<br>6. Increased pulse  | 1, 2, 4. Head tilt, vomiting, and lethargy are classic signs assessed in a child with a brain tumor. Clinical manifestations are the result of location and size of the tumor.   |
| A lumbar puncture is performed on a child suspected of having bacterial meningitis. CSF is obtained for analysis. A nurse reviews the results of the CSF analysis and determines that which of the following results would verify the diagnosis?<br>1. Cloudy CSF, decreased protein, and decreased glucose<br>2. Cloudy CSF, elevated protein, and decreased glucose<br>3. Clear CSF, elevated protein, and decreased glucose<br>4. Clear CSF, decreased pressure, and elevated protein          | 2<br>A diagnosis of meningitis is made by testing CSF obtained by lumbar puncture. In the case of bacterial meningitis, findings usually include an elevated pressure, turbid or cloudy CSF, elevated leukocytes, elevated protein, and decreased glucose levels.  |
| A nurse is planning care for a child with acute bacterial meningitis. Based on the mode of transmission of this infection, which of the following would be included in the plan of care?<br>1. No precautions are required as long as antibiotics have been started<br>2. Maintain enteric precautions<br>3. Maintain respiratory isolation precautions for at least 24 hours after the initiation of antibiotics<br>4. Maintain neutropenic precautions  | 3<br>A major priority of nursing care for a child suspected of having meningitis is to administer the prescribed antibiotic as soon as it is ordered. The child is also placed on respiratory isolation for at least 24 hours while culture results are obtained and the antibiotic is having an effect.   |
| A nurse is reviewing the record of a child with increased ICP and notes that the child has exhibited signs of decerebrate posturing. On assessment of the child, the nurse would expect to note which of the following if this type of posturing was present?<br>1. Abnormal flexion of the upper extremities and extension of the lower extremities<br>2. Rigid extension and pronation of the arms and legs<br>3. Rigid pronation of all extremities<br>4. Flaccid paralysis of all extremities | 2<br>Decerebrate posturing is characterized by the rigid extension and pronation of the arms and legs.   |
| Which of the following assessment data indicated nuchal rigidity?<br>1. Positive Kernig's sign<br>2. Negative Brudzinski's sign<br>3. Positive homan's sign<br>4. Negative Kernig's sign  | 1<br>A positive Kernig's sign indicated nuchal rigidity, caused by an irritative lesion of the subarachnoid space. Brudzinski's sign is also indicative of the condition.  |
| Meningitis occurs as an extension of a variety of bacterial infections due to which of the following conditions?  | 2<br>Extension of a variety of bacterial infections is a major causative   |

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| <ol style="list-style-type: none"> <li>1. Congenital anatomic abnormality of the meninges</li> <li>2. Lack of acquired resistance to the various etiologic organisms</li> <li>3. Occlusion or narrowing of the CSF pathway</li> <li>4. Natural affinity of the CNS to certain pathogens</li> </ol>  | <p>factor of meningitis and occurs as a result of a lack of acquired resistance to the etiologic organisms. Preexisting CNS anomalies are factors that contribute to susceptibility.</p>  |
| <p>Which of the following pathologic processes is often associated with aseptic meningitis?</p> <ol style="list-style-type: none"> <li>1. Ischemic infarction of cerebral tissue</li> <li>2. Childhood diseases of viral causation such as mumps</li> <li>3. Brain abscesses caused by a variety of pyogenic organisms</li> <li>4. Cerebral ventricular irritation from a traumatic brain injury</li> </ol> | <p>2</p> <p>Aseptic meningitis is caused principally by viruses and is often associated with other diseases such as measles, mumps, herpes, and leukemia. Incidences of brain abscess are high in bacterial meningitis, and ischemic infarction of cerebral tissue can occur with tubercular meningitis. Traumatic brain injury could lead to bacterial (not viral) meningitis.</p> |

# Neuro Med/Surg

# NCLEX Questions

1.

A patient with Parkinson's disease has a nursing diagnosis of Impaired Physical Mobility related to neuromuscular impairment. You observe a CNA performing all of these actions. For which action must you intervene?

- A. The CNA assists the patient in ambulating to the bathroom and returning to bed.
- B. The CNA reminds the patient not to look at his feet when walking.
- C. The CNA performs the patient's complete bath and oral care.
- D. The CNA sets up the patient's tray and encourages the patient to feed himself.

2.

The nurse is preparing to discharge a patient with chronic low back pain. Which statement by the patient indicates that additional teaching is necessary?

- A. "I will avoid exercise because the pain gets worse."
- B. "I will use heat or ice to help control the pain."
- C. "I will not wear high-heeled shoes at home or work."
- D. "I will purchase a firm mattress to replace my old one."

3.

A patient with a spinal cord injury (SCI) complains about a severe throbbing headache that suddenly started a short time ago. The patient's assessment reveals increased blood pressure (168/94) and decreased heart rate (48/minute), diaphoresis, and flushing of the face and neck. What action should you take first?

- A. Administer the ordered acetaminophen (Tylenol).
- B. Check the Foley tubing for kinks or obstruction.
- C. Adjust the temperature in the patient's room.
- D. Notify the physician about the change in status.

4.

As a charge nurse, which patient should you assign to a new graduate RN who is orienting to the neurologic unit?

- A. A 28-year-old newly admitted patient with a spinal cord injury.
- B. A 67-year-old patient with a stroke 3 days ago and left-sided weakness.
- C. An 85-year-old dementia patient to be transferred to long-term care today.
- D. A 54-year-old patient with Parkinson's who needs assistance with bathing.

5.

A patient with a spinal cord injury at level C3-4 is being cared for in the ED. What is the priority assessment?

- A. Determine the level at which the patient has intact sensation.
- B. Assess the level at which the patient has retained mobility.
- C. Check blood pressure and pulse for signs of spinal shock.
- D. Monitor respiratory effort and oxygen saturation levels.

6.

You are pulled from the ED to the neurologic floor. Which action should you delegate to the CNA when providing nursing care for a patient with SCI?

- A. Assess the patient's respiratory status every 4 hours.
- B. Take the patient's vital signs and record them every 4 hours.
- C. Monitor nutritional status, including calorie counts.
- D. Have the patient turn, cough, and deep breathe every 3 hours.

7.

You are helping the patient with an SCI to establish a bladder-retraining program. What strategies may stimulate the patient to void? Select all that apply.

- A. Stroke the patient's inner thigh.
- B. Pull on the patient's pubic hair.
- C. Initiate intermittent straight catheterization.
- D. Pour warm water over the perineum.
- E. Tap the bladder to stimulate the detrusor muscle.

8.

The patient with a cervical SCI has been placed in fixed skeletal traction with a Halo fixation device. When caring for this patient, the nurse may delegate which action (s) to the LPN/LVN. Select all that apply.

- A. Check the patient's skin for pressure from the device.
- B. Assess the patient's neurologic status for changes.
- C. Observe the halo insertion sites for signs of infection.
- D. Clean the halo insertion sites with hydrogen peroxide.

9.

You are preparing a nursing care plan for the patient with SCI, including the nursing diagnoses of Impaired Physical Mobility and Self-Care Deficit. The patient says, "I don't know why we're doing all this. My life's over." Based on this statement, what additional nursing diagnosis takes priority?

- A. Risk for Injury related to altered mobility
- B. Imbalanced Nutrition, Less Than Body Requirements
- C. Impaired Adjustment to Spinal Cord Injury
- D. Poor Body Image related to immobilization

10.

Which patient should be assigned to the traveling nurse who is new to neurologic nursing care and has been in the neurologic unit for one week?

- A. A 34-year-old patient was newly diagnosed with multiple sclerosis (MS).
- B. A 68-year-old patient with chronic amyotrophic lateral sclerosis (ALS).
- C. A 56-year-old patient with Guillain-Barre syndrome (GBS) in respiratory distress.
- D. A 25-year-old patient was admitted with a C5 level spinal cord injury (SCI).

11.

The patient with multiple sclerosis tells the CNA that after physical therapy, she is too tired to take a bath. What is your priority nursing diagnosis at this time?

- A. Fatigue related to the disease state
- B. Activity Intolerance due to generalized weakness
- C. Impaired Physical Mobility related to neuromuscular impairment
- D. **Self-care Deficit related to fatigue and neuromuscular weakness** The LPN/LVN, under your supervision, is providing nursing care for a patient with GBS. What observation would you instruct the LPN/LVN to report immediately?
- E. Complaints of numbness and tingling.
- F. Facial weakness and difficulty speaking.
- G. Rapid heart rate of 102 beats per minute.
- H. **Shallow respirations and decreased breath sounds.**

12.

The CNA reports to you, the RN, that the patient with myasthenia gravis (MG) has an elevated temperature (102.20 F), a heart rate of 120/minute, a rise in blood pressure (158/94), and was incontinent of urine and stool. What is your best first action at this time?

- A. Administer an acetaminophen suppository.
- B. **Notify the physician immediately.**
- C. Recheck vital signs in 1 hour
- D. Reschedule the patient's physical therapy session

13.

You are providing care for a patient with an acute hemorrhagic stroke. The patient's husband has been reading a lot about strokes and asks why his wife did not receive alteplase. What is your best response?

- A. "Your wife was not admitted within the time frame that alteplase is usually given."
- B. "This drug is used primarily for patients who experience an acute heart attack."
- C. **"Alteplase dissolves clots and may cause more bleeding into your wife's brain."**
- D. "Your wife had gallbladder surgery just 6 months ago, and this prevents the use of alteplase."

14.

You are supervising a senior nursing student caring for a patient with a right hemisphere stroke. Which action by the student nurse requires that you intervene?

- A. **The student instructs the patient to sit up straight, resulting in the patient's puzzled expression.**
- B. The student moves the patient's tray to the right side of her over-bed tray.
- C. The student assists the patient with passive range-of-motion (ROM) exercises.
- D. The student combs the left side of the patient's hair while the patient combs only the right.

15.

Which of the following arteries primarily feeds the anterior wall of the heart?

- A. Circumflex artery
- B. Internal mammary artery
- C. **Left anterior descending artery**
- D. Right coronary artery

16.

When do coronary arteries primarily receive blood flow?

- A. During inspiration
- B. During diastole
- C. During expiration
- D. During systole

17.

Which of the following illnesses is the leading cause of death in the US?

- A. Cancer
- B. Coronary artery disease
- C. Liver failure
- D. Renal failure

18.

Which of the following conditions most commonly results in CAD?

- A. Atherosclerosis
- B. DM
- C. MI
- D. Renal failure

19.

Atherosclerosis impedes coronary blood flow by which of the following mechanisms?

- A. Plaques obstruct the vein
- B. Plaques obstruct the artery
- C. Blood clots form outside the vessel wall
- D. Hardened vessels dilate to allow the blood to flow through

20.

Which of the following risk factors for coronary artery disease cannot be corrected?

- A. Cigarette smoking
- B. DM
- C. Heredity
- D. HPN

21.

Exceeding which of the following serum cholesterol levels significantly increases the risk of coronary artery disease?

- A. 100 mg/dl
- B. 150 mg/dl
- C. 175 mg/dl
- D. 200 mg/dl

22.

Which of the following actions is the priority care for a client exhibiting signs and symptoms of coronary artery disease?

- A. Decrease anxiety
- B. Enhance myocardial oxygenation
- C. Administer sublingual nitroglycerin
- D. Educate the client about his symptoms

Medical treatment of coronary artery disease includes which of the following procedures?

- E. Cardiac catheterization
- F. Coronary artery bypass surgery
- G. Oral medication administration
- H. Percutaneous transluminal coronary angioplasty

23.

Prolonged occlusion of the right coronary artery produces an infarction in which of the following areas of the heart?

- A. Anterior
- B. Apical
- C. Inferior
- D. Lateral