M_NPAdGerAcuteCPQ (900+ Questions) - Quiz Questions with Answers

1.

For patients with diabetes mellitus, the first indication of diabetic nephropathy is usually:

Increased creatinine

Increased blood urea nitrogen (BUN)

Microalbuminuria

Macroalbuminuria

Explanation:

For patients with diabetes mellitus, the first indication of diabetic nephropathy, the most common cause of end-stage renal disease, is usually microalbuminuria. Microalbuminuria is usually detectable before a decrease in the glomerular filtration rate (GFR) and occurs 10 to 15 years after the onset of diabetes. With the onset of microalbuminuria, the patient should be maintained on strict glycemic control and treatment of hypertension to slow the progression. Angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs) have been shown to slow progression by reducing pressure within the glomeruli.

2.

If a patient reports that injuries resulted from domestic violence, when documenting the abuse in the patient's health record, the NP should:

Summarize the patient's statements

Indicate only that abuse occurred

Use direct quotations to document the patient's statements

Record no information but fill out an incident report

Explanation:

If a patient reports that injuries resulted from domestic violence, when documenting the abuse in the patient's health record, the NP should use direct quotations to document the patient's statements. The NP should make notes that are as detailed and accurate as possible, including descriptions of all injuries (size, location, extent) and any interventions because the health record may become part of a criminal proceeding.

3.

Which of the following Healthcare Common Procedure Coding System (HCPCS) level II codes is used when filing a Medicare claim for durable medical equipment, such as a bedside commode?

D codes

E codes

L codes

P codes

Explanation:

Healthcare Common Procedure Coding System (HCPCS) level II E codes are used when filing a Medicare claim for durable medical equipment, such as a bedside commode. D codes are used for dental procedures and include the Current Dental Terminology (CDT) code set copyrighted by the American Dental Association (ADA). L codes are used for orthotic and prosthetic procedures and devices such as orthopedic shoes. P codes are used for pathology and laboratory services.

4.

One week after a tick bite, a patient develops erythema migrans (15 cm diameter) (a bull's-eye rash) with slight burning at the bite site. In an area endemic to Lyme disease, the treatment of choice is:

Azithromycin 500 mg for 3 days

Erythromycin 500 mg BID for 7 days

Ciprofloxacin 500 mg BID for 1 to 2 weeks

Doxycycline 100 mg BID for 2 to 3 weeks

Explanation:

If, one week after a tick bite, a patient develops erythema migrans (15 cm diameter) (a bull's-eye rash) with slight burning at the bite site, in an area endemic to Lyme disease, the treatment of choice is doxycycline 100 mg BID for 2 to 3 weeks. Lyme disease is caused by the spirochete Borrelia burgdorferi. Although some patients are asymptomatic, Lyme disease can cause flu-like symptoms, joint pain, arthritis, and severe neurological disorders.

5.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Security Rule applies to protected health information (PHI) that is transmitted:

Orally

In writing

Electronically

In any manner

Explanation:

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Security Rule applies to protected health information (PHI) that is transmitted electronically. The Security Rule was developed to meet the requirements of the HIPAA Privacy Rule. The Security Rule requires that safeguards (administrative, physical, and technical) be in place to protect electronic health information from threats, hazards, and nonpermitted disclosures. Access must be limited to

authorized users only. Other safeguards include automatic logoff and encryption and decryption of protected healthcare information.

6.

Which of the following is typically present with vertigo associated with Ménière's syndrome?

Tinnitus and low-frequency hearing loss

Headache

Photosensitivity

Head pressure

Explanation:

Tinnitus and low-frequency hearing loss are typically present with vertigo associated with Ménière's syndrome (endolymphatic hydrops) and help to differentiate it from vertigo associated with migraines, which are more often associated with headache, photosensitivity, and head pressure. Typically, patients with Ménière's syndrome have episodes of vertigo that last from 20 minutes to several hours. In addition to tinnitus and fluctuating low-frequency hearing loss, patients may feel pressure in the inner ear.

7.

Health literacy is directly affected by general literacy, so when educating patients, the NP should realize that the approximate percentage of adults in the U.S. who are classified as illiterate or low literate is:

25%

40%

50%

70%

Explanation:

Health literacy is directly affected by general literacy, so when educating patients, the NP should realize that the approximate percentage of adults in the U.S. who are classified as illiterate or low literate is 50%. More than 20% of the population is classified as functionally illiterate, and between 25% and 30% is low literate. Printed education materials for these patients should include illustrations and pictures with minimal text written at about the 4th-grade level.

8.

A 72-year-old patient has three polyps removed during a routine colonoscopy. Which of the following types of polyps are precancerous?

Epithelial hyperplastic

Adenomatous

Inflammatory

Submucosal (fibroma)

Explanation:

If a 72-year-old patient has polyps removed, the type of polyp that is precancerous is the adenomatous polyp, which can include tubular adenomas, tubulovillous adenoma, and villous adenoma. Polyps associated with hereditary polyposis syndromes (familial adenomatous polyposis) are also precancerous. Patients with precancerous polyps are generally advised to have routine follow-up colonoscopies every 3 years because of the increased risk of colon cancer.

9.

Female patients should generally be advised to begin breast cancer screening with routine mammograms at about age:

20 to 30

30 to 40

40 to 50

50 to 60

Explanation:

Female patients should generally be advised to begin breast cancer screening with routine mammograms at about age 40 to 50. The breast tissue is denser in younger women, so the mammogram results are less accurate. Although authorities differ in the frequency with which mammograms should be done and the starting age, most recommend that female patients have mammograms every one to two years. Although some authorities recommend screening beginning at age 40, the American Cancer Society recommends beginning at age 45 and the U.S. Preventive Services Task Force at age 50.

10.

Which of the following conditions of the breast may pose the greatest risk for the development of breast cancer?

Lipoma

Hemangioma

Epithelial-related calcifications

Atypical ductal hyperplasia

Explanation:

The condition that may pose the greatest risk for the development of breast cancer is atypical ductal hyperplasia. Hyperplasia, an overgrowth of tissue, within the ducts or lobes of the breast increases the risk up to 5 times if atypical. Ductal hyperplasia without atypia doubles the risk. If a woman has hyperplasia and a family history of breast cancer, the risk increases as well. Benign lesions that are not associated with overgrowth of breast tissue (such as lipoma and hemangioma) do not increase a person's risk.

11.

Which of the following healthcare services can an adolescent younger than 18 access or refuse without parental knowledge or consent in most states?

- **Emergency contraception**
- Abortion
- Chemotherapy
- Transfusions

Explanation:

An adolescent younger than 18 can access or refuse emergency contraception without parental knowledge or consent across the United States. Although the product information states the contraception is intended for those 17 and older, in fact, no ID is required to purchase emergency contraception, so it is available to younger adolescents. In most states, abortions for adolescents require parental knowledge or consent of some kind (one parent, both parents). Chemotherapy and transfusions require parental consent, although the adolescent's opinion may be considered.

12.

The NP has prescribed acetaminophen for a 78-year-old patient and should advise the patient to limit total dosage to:

- 1 g in 24 hours
- **2 g in 24 hours**
- 3 g in 24 hours
- 4 g in 24 hours

Explanation:

If the NP has prescribed acetaminophen for a 78-year-old patient, the NP should advise the patient to limit total dosage to 2 g in 24 hours because older adults may not metabolize the drug as effectively as younger adults (who may have a total dosage of 3 to 4 g in 24 hours).

Those of any age with liver disease must not exceed 2 g daily, and if the liver damage is severe, he or she should avoid acetaminophen altogether.

13.

A prevention strategy that encourages physicians, nurses, and other healthcare providers to discuss substance abuse with all adolescents is an example of:

Secondary prevention

Universal primary prevention

Indicated primary prevention

Targeted primary prevention

Explanation:

Targeted primary prevention. Primary prevention strategies include the following:

- *Targeted: Aimed at a select group or subgroup with perceived risk. Strategies may include encouraging physicians to intervene with brief advice, such as advising all adolescents about the dangers of substance abuse.*
- *Universal: Aimed at the entire population, nonspecific. These strategies may include mass-marketing procedures, such as multimedia antidrug campaigns aimed at the general public.*
- *Indicated: Aimed at individuals at high risk, such as adolescents in environments with heavy drug use.*

Secondary prevention includes efforts to prevent further drug abuse, such as Narcotics Anonymous.

14.

The patient's problem list contains the following four items: (1) hypertension (150/92), (2) diabetes mellitus, type 2 (A1c 8%), (3) neuropathy of both feet, and (4) infected ingrown toenail. Treatment would be prioritized (ranked from highest priority to lowest):

4, 2, 1, and 3

2, 4, 1, and 3

1, 2, 4, and 3

2, 1, 3, and 4

Explanation:

4, 2, 1, and 3. The highest priority is the infected ingrown toenail because of the high risk of amputation with diabetes and foot injuries or infections. The second highest priority is diabetes mellitus, type 2, because the A1c of 8% indicates that control is poor, and this could cause the increase in blood pressure, which should be attended to next. Neuropathy of both feet is a chronic condition, also likely worsened by the diabetes mellitus, and it has the lowest priority.

15.

The NP is educating a patient who is to be discharged after surgery to remove a cancerous lesion of the colon and create a colostomy. The NP advises the patient that foods that may cause a noticeable odor include:

Green beans, raw fruits, spicy foods, and spinach

Popcorn, seeds, raw vegetables, and corn

Fish, eggs, onions, broccoli, asparagus, and cabbage

Beans, carbonated beverages, strong cheeses, and sprouts

Explanation:

The NP is educating a patient who is to be discharged after surgery to remove a cancerous lesion of the colon and create a colostomy. The NP advises the patient that some foods may cause:

- *Odor: fish, eggs, onions, broccoli, asparagus, and cabbage.*
- *Gas: beans, carbonated beverages, strong cheeses, beer, and sprouts.*
- *Diarrhea: beer, green beans, coffee, raw fruits, spicy foods, and spinach.*
- *Obstruction: popcorn, seeds, raw vegetables, nuts, and corn.*

16.

If an Orthodox Jewish male patient needs an examination, and the NP is female, the NP should:

Ask the patient if he would prefer to be examined by a male nurse

Carry out the examination unless the patient complains

Refuse to examine the patient

Only ask questions but avoid touching the patient

Explanation:

If an Orthodox Jewish male patient needs an examination, and the NP is female, the nurse should ask the patient if he would prefer to be examined by a male nurse. Many Orthodox Jewish males feel very uncomfortable being touched by a female and may refuse. If no male nurse is available, the patient should be advised. In that case, if the physician is male, then the part of the examination that involves touching the person may be done by the physician.

17.

When collecting a medication history, the NP should include:

Prescription drugs only

Prescription drugs and over-the-counter (OTC) drugs

Prescription drugs, OTC drugs, and vitamin supplements

Prescription drugs, OTC drugs, vitamin supplements, and any other health-related substances

Explanation:

When collecting a medication history, the NP should include prescription drugs, over-the-counter (OTC) drugs, vitamins, and any other health-related substances, including those that are topical or inhaled. Patients may take herbal or homeopathic substances and neglect to include

them, but they can, in some instances, affect the absorption of other prescribed medications. Patients often to forget to include vitamin supplements unless asked specifically about them.

18.

Which class of medications should be avoided in frail elderly adults?

Nonsteroidal anti-inflammatory drugs (NSAIDs)

Benzodiazepines

Beta-blockers

Bronchodilators

Explanation:

Benzodiazepines (alprazolam, diazepam, lorazepam, and chlordiazepoxide) are antianxiety drugs that should be avoided in frail elderly adults because these drugs can increase the risk of falls. Most adverse effects are associated with depression of the central nervous system (CNS) and include headache, lethargy, hypotension, and dizziness. Benzodiazepines should not be taken with alcohol or tobacco. Some other drugs may increase CNS depression, including cimetidine, disulfiram, and monoamine oxidase inhibitors (MAOIs). Some patients may have paradoxical reactions to benzodiazepines and develop hyperactive responses.

19.

If a patient who appears to be a drug seeker demands a prescription for OxyContin for severe chronic migraine headaches, the best response is likely to:

Believe the patient

Provide a small amount of drugs

Verify the patient's medical history with previous healthcare providers

Refuse service to the patient

Explanation:

If a patient who appears to be a drug seeker demands a prescription for OxyContin for severe chronic migraine headaches, the best response is likely to verify the patient's medical history with previous healthcare providers. If the patient is unwilling to provide this information or if the information provided is incorrect, these are further indications of drug-seeking behavior. The patient should be thoroughly examined, and the extent of the examination and the questions asked should be documented.

20.

If a patient telephones the acute care telehealth line with complaints of abdominal pain and the NP is screening the patient, which of the following additional symptoms represents an emergent situation and should result in the NP advising the patient to hang up and call 911?

Fever of 38 °C (100.4 °F) and slight chills

Increasing shortness of breath and chest discomfort

Severe constipation for 2 to 3 days

Mild nausea and vomiting twice in 24 hours

Explanation:

If a patient telephones an ambulatory care center with complaints of abdominal pain and the NP is screening the patient, the additional symptoms that should result in the nurse advising the patient to hang up and call 911 are increasing shortness of breath and chest discomfort because these may suggest severe cardiovascular problems, such as a myocardial infarction or aortic aneurysm. The patient should be advised to be seen in the office as soon as possible with mild fever or with mild nausea and vomiting. Patients with severe constipation should usually be seen within 24 to 48 hours.

21.

A 22-year-old female patient who is nulliparous and sexually active with multiple sex partners presents in the emergency department with chills and a temperature of 39 °C (102.2 °F), purulent vaginal discharge, lower abdominal pain, and cervical and adnexal tenderness. Ectopic pregnancy is ruled out. Based on these findings, the patient should receive treatment for probable:

Pelvic inflammatory disease

Cervicitis

Endometriosis

Bacterial vaginosis

Explanation:

If a 22-year-old female patient who is nulliparous and sexually active with multiple sex partners presents in the emergency department with chills and a temperature of 39 °C (102.2 °F), purulent vaginal discharge, lower abdominal pain, and cervical and adnexal tenderness, and ectopic pregnancy is ruled out, the patient should receive treatment for probable pelvic inflammatory disease with immediate antibiotics. If possible, the patient's sexual partners should also be identified and treated.

22.

Which of the following hematology tests is outside of normal parameters for an adult male?

Red blood cell (RBC) count of 4.6 million/mm^3

Hemoglobin (Hgb) of 15 g/dL

Hematocrit (Hct) of 44%

White blood cell (WBC) count of 4100/mm^3

Explanation:

The hematology test that is outside of normal parameters for an adult male is a white blood cell (WBC) count of 4100/mm^3. Normal values range from about 4500 to 11,000/mm^3. A normal red blood cell (RBC) count is 4.5 to 6 million/mm^3 for males and 4.0 to 5.5 million/mm^3 for females. Normal hemoglobin ranges from 13 to 18 g/dL for males and 12 to 16 g/dL for females. Normal hematocrit ranges from 42% to 52% for males and from 36% to 45% for females.

23.

A patient with stage 4 prostate cancer has recently completed a course of radiation to relieve spinal compression from bone metastasis. His pain is well controlled with Fentanyl, but he is fearful and he has developed tremors and jerking movements of his extremities, and these are keeping him awake at night. The most likely cause of the tremor and jerking movements is:

Brain metastasis

Spinal damage

Anxiety

Opioid-induced myoclonus

Explanation:

Tremors and jerking movements are consistent with opioid-induced myoclonus, which may be caused by a range of drugs, including opioids and quinolones. In this case, changing to an equianalgesic should relieve symptoms in one to two days. If the myoclonus is very mild, a benzodiazepine at bedtime may keep jerking from awakening the patient. Although similar symptoms may occur with brain metastasis, it is an uncommon metastasis with prostate cancer. Anxiety may also produce similar symptoms, but they should be less pronounced and less likely to cause jerking during sleep. Damage to the spine would produce different symptoms.

24.

Because combining monoamine oxidase inhibitors (MAOIs) with some foods may cause adverse reactions (hypertension, headache, diaphoresis, cardiac abnormalities, intracerebral hemorrhage), patients taking MAOIs should be advised to avoid which of the following foods/beverages?

Alcohol and grapefruit juice

Alcohol, products containing caffeine (tea, cola, chocolate coffee), and foods high in tyramine (organ meats, cured meats, cheese, raisins, avocados, and soy)

Foods high in vitamin K (broccoli, spinach, Brussels sprouts, cauliflower, kale) and vitamin E supplements

Milk products and vitamins, vitamins and minerals containing iron, and caffeine

Explanation:

Monoamine oxidase inhibitors (MAOIs) should not be taken with alcohol and nonalcoholic substitutes for beer or wine, foods high in tyramine (organ meats, cured meats, caviar, cheese products, avocados, bananas, raisins, soy, and fava beans), and products containing caffeine (tea, cola, chocolate, and coffee). MAOIs are older antidepressant medications that are used less frequently now that others are available because they have significant side effects and interactions with other medications, such as decongestants, opioids, and antidepressants.

25.

When the NP enters the room of a patient whose death is imminent, the daughter states, "I can't stay in the room when Dad dies! I can't stand the thought!" The best response is:

"You will regret it if you don't."

"Your father would want you with him."

"I'll stay with him, and you can come and go as you feel comfortable."

"Is there someone else who can stay with him?"

Explanation:

The NP should remain supportive and nonjudgmental. "I'll stay with him, and you can come and go as you feel comfortable" supports the daughter's stated desire while still leaving open the opportunity for her to spend time with her father during the death vigil. People react in very different ways to death, and many people have never seen a deceased person and may be very frightened. While some people find comfort in being with a dying friend or family member, this should never be imposed on anyone.

26.

A patient with ovarian cancer suddenly develops severe nausea and vomiting in large volumes. Her abdomen is painful and rigid, her bowel sounds are diminished, and she feels short of breath. She

has no fever. She reports that she has had only very small bowel movements recently. The most likely diagnosis is:

- Fecal impaction
- **Obstruction of small intestines**
- Obstruction of colon
- Peritonitis

Explanation:

These symptoms are consistent with obstruction of the small intestines. Sudden and frequent nausea and vomiting in large volumes, often immediately after intake, usually indicates that a bowel obstruction is in the small intestines, whereas obstructions of the colon usually result in more delayed vomiting, with fecal emesis. If obstruction is partial or inoperable, dexamethasone may relieve some of the symptoms because it reduces inflammation and swelling as well as providing relief of nausea.

27.

A 32-year-old male presents with swelling, erythema, and severe pain of the metatarsophalangeal (MTP) joint of the right great toe after a night of excessive drinking. Lab testing shows elevated uric acid, confirming an acute gout attack. The most appropriate treatment is:

- **A nonsteroidal anti-inflammatory drug (NSAID)**
- Colchicine
- A corticosteroid
- An antibiotic

Explanation:

If a 32-year-old male presents with swelling, erythema, and severe pain of the metatarsophalangeal (MTP) joint of the right great toe after a night of excessive drinking, and lab testing shows elevated uric acid, confirming an acute gout attack, the most appropriate treatment is a nonsteroidal anti-inflammatory drug (NSAID), such as indomethacin or ibuprofen.

Colchicine should not be used to treat acute flare-ups. Corticosteroids should be reserved for those intolerant of NSAIDs. Antibiotics are not indicated because this is not an infective process.

28.

A patient has marked bilateral nonpitting edema of both lower legs and feet, including his toes, and he has thickening of the skin but no pigmentation. This edema can most likely be characterized as:

Orthostatic edema

Lymphedema

Lipedema

Chronic venous insufficiency

Explanation:

Lymphedema*: Hard, nonpitting edema with skin thickening but no pigmentation. Edema usually includes feet and toes and often occurs bilaterally.* ***Orthostatic edema****: Occurs with prolonged sitting and is soft and pitting but without skin thickening or pigmentation. It is always bilateral and includes edema of the foot.* ***Lipedema****: Bilateral fatty deposition in legs may mimic edema, but there is no pitting, skin thickening, or pigmentation and no edema of the foot.* ***Chronic venous insufficiency****: Edema is soft and pitting initially but may harden later. Skin thickening may occur around the ankle, and pigmentation changes are common. Edema often involves feet and is sometimes bilateral.*

29.

Which of the following is the correct documentation of undermining?

“Extends 1.8 cm width about one-quarter of the wound perimeter.”

“Extends ¾ inch width by the right lower quadrant of the wound.”

“Extends 1.8 cm width from 1 o’clock to 4 o’clock.”

“Extends ¾ inch width from 1 o’clock to 4 o’clock.”

Explanation:

Undermining, which is damaged tissue under intact skin, usually occurs around the perimeter of a wound. Undermining is reported in centimeters and in relation to the open wound by reference to a clock face: “Extends 1.8 cm width from 1 o’clock to 4 o’clock.” If the undermining is open, it can be measured by insertion of a sterile swab. In some cases, tissue may be damaged but it remains intact; in that case, undermining is estimated by palpation because undermined tissue may feel spongy.

30.

If, while conducting a peer review, the NP observes the other nurse using nontherapeutic communication techniques with a patient, the best response is to:

Immediately intervene

Discuss at a post-review meeting

Report the observation to a supervisor

Ignore it because it does not constitute negligence

Explanation:

If, while conducting a peer review, the NP observes the other nurse using nontherapeutic communication techniques with a patient, the best response is to discuss the observations at a post-review meeting because the nurse is not being negligent, so there is no need to intervene immediately or report the observation. During the discussion, the NP should prompt the other nurse by stating, “How did you feel about your communication with the patient?”

31.

The four nonverbal behaviors that are associated with active listening include:

Sit beside the patient, maintain open posture, lean back comfortably, and maintain eye contact

Sit across from the patient, maintain closed posture, lean forward, and avoid eye contact

Sit across from the patient, maintain open posture, lean forward, and maintain eye contact

Sit beside the patient, maintain open posture, lean forward, and maintain eye contact

Explanation:

The four nonverbal behaviors associated with active listening include the following:

- *Sit across from the patient: Facing the patient directly helps to convey interest.*
- *Maintain open posture: Keeping the arms and legs uncrossed helps to show that the person is open to the other person's ideas and is less defensive than a closed position.*
- *Lean forward: Leaning toward the patient slightly shows engagement in the interaction.*
- *Maintain eye contact: Maintaining eye contact helps to show interest in the person; however, the NP should keep cultural differences in mind because direct eye contact is not the norm in all cultures*

32.

A 20-year-old patient with Tourette's syndrome has had increasing social problems and academic problems, often having difficulty completing activities. For which common comorbidity should the patient be evaluated?

Obsessive-compulsive disorder (OCD)

Depression

Schizophrenia

Bipolar disorder

Explanation:

If a 20-year-old patient with Tourette's syndrome has increasing social problems and academic problems, often having difficulty completing activities, the common comorbidity for which the patient should be evaluated is obsessive-compulsive disorder (OCD). Between 30% and 50% of patients with Tourette's develop OCD, and up to 80% exhibit obsessive behavior. Adults with

Tourette's and OCD are at risk for attention-deficit/hyperactivity disorder (ADHD) and self-injurious behavior, such as picking at scabs, self-cutting, head banging, and self-burning.

33.

A 16-year-old patient identifying as a girl fails to begin menstruation despite breast development and develops only scant pubic and underarm hair. On physical examination, the patient is found to have only a vaginal stump but no cervix or uterus, and inguinal testes are found. Testing shows that the patient is genetically male and has complete androgen insensitivity syndrome (CAIS). The best approach with the patient is to:

Provide the information only to the parents

Advise the patient to transition to living as a male

Withhold the information until the patient is 18

Provide a full explanation to the patient

Explanation:

If a 16-year-old patient identifying as a girl is found to be genetically male with complete androgen insensitivity syndrome (CAIS), the best approach is to provide a full explanation to the patient. Because the patient is not able to respond to the testosterone or other androgens that the body produces but does respond to estrogen, the patient has imprinted as a female and will likely choose to live as a female, but this decision must be made by the patient.

34.

When screening an older adult for depression with the Geriatric Depression Scale, short form (GDS-SF) with 15 questions, what is the minimal score that indicates possible depression?

3

6

8

10

Explanation:

When screening an older adult for depression with the Geriatric Depression Scale, short form (GDS-SF) with 15 questions, the minimal score that indicates possible depression is 6 (>5). Patients answer "yes/no" to questions about their satisfaction with life, feelings, memory problems, and general situation, with "yes" answers indicating depression. Patients who score greater than 5 should be further evaluated. A score greater than 10 almost always indicates depression. The short form requires about 5 to 7 minutes to complete. A long form with 30 questions is also available, although the short form is more commonly used for screening.

35.

Mike Brown has completed gender reassignment surgery (male-to-female) and is now legally Mikaela Brown. Mikaela states that she is still attracted to females and not males. Her sexual orientation should be most appropriately classified as:

Lesbian

Heterosexual

Homosexual

Bisexual

Explanation:

Once a person completes gender reassignment surgery and legally changes genders, that person is then considered the reassigned gender; thus, Mikaela is considered female, so her attraction to other females would result in her sexual orientation as lesbian. If she were attracted to males, she would be heterosexual. While she could also be classified as homosexual, this term is more commonly used for gay males, and she is no longer considered a male. She does not report a bisexual attraction to both genders.

36.

During registration, a new patient must sign an assignment of benefits form so that the:

Patient can receive reimbursement for claims

Provider is prohibited from releasing information about the patient

Provider can have access to the healthcare record

Provider can bill the insurance companies

Explanation:

During registration, a new patient must sign an assignment of benefits form so that the provider can bill the insurance companies and receive reimbursement for claims directly. If there is no assignment of benefits, then the patient files the claim with the insurance company rather than the provider. This is sometimes the case if a patient is seeing a healthcare provider that is not in his/her network and doesn't, therefore, bill the insurance for care provided.

37.

A 32-year-old woman with autoimmune myasthenia gravis (MG) has fluctuating but increasing muscle weakness. She reports that she has begun to sleep in her chair because she sleeps better sitting upright, and during the interview, she yawns and sighs frequently. Which of the following interventions is most appropriate based on these symptoms?

Respiratory assessment with pulmonary function tests

Acetylcholine receptor (AChR) antibody titer

Repetitive nerve stimulation

Ice pack test

Explanation:

Orthopnea, frequent yawning, and sighing may indicate increased respiratory compromise in a person with myasthenia gravis (MG), so a complete respiratory assessment is warranted, including pulmonary function tests and pulse oximetry. The acetylcholine receptor (AChR) antibody titer is used to diagnose autoimmune MG. Repetitive nerve stimulation assesses

neuromuscular transmission. The ice pack test consists of applying an ice pack to ptosis for 2 minutes and then evaluating the ptosis. Improvement is positive for MG.

38.

A 74-year-old woman recovering from hip surgery had been mentally alert prior to surgery but has a sudden change in mental status with disorientation, fluctuations in level of consciousness, and agitation. Her medications include Glucophage, a thiazide diuretic, and acetaminophen with codeine. Which of the following is the most appropriate initial intervention for suspected delirium?

Provide side rails and restraints to prevent injury

Provide antipsychotic medication to control symptoms

Ask the patient to count backward from 20 to 1 to assess attention

Discontinue all medications immediately

Explanation:

Asking the patient to count backward from 20 to 1 can help identify an attention deficit. Other signs of delirium include language and memory disturbance, disorientation, confusion, audiovisual hallucinations, and sleep disturbance. Delirium, different from disorders with similar symptoms, is fluctuating. Delirium may result from drugs, infection, hypoxia, trauma, dementia, depression, vision and hearing loss, surgery, alcoholism, untreated pain, fluid/electrolyte imbalance, and malnutrition. Treatment includes providing a sitter to ensure safety and decreasing dosages of hypnotics and psychotropics. Protocols for side rails and restraints must be followed, and restraints are used as a last resort. Medications to reduce symptoms include trazodone, lorazepam, and haloperidol.

39.

Parenteral nutrition with a total nutrient admixture (TNA) that includes lipids has been ordered for a burn patient for administration over a 24-hour period. When preparing to administer the solution, the NP observes that the oil has separated, forming an obvious layer. Which is the correct action?

Administer the solution because oil separation is normal

Mix the solution by shaking the bag until no oil separation is noticeable

Discard the solution

Return the solution to the pharmacy for addition of an emulsifier

Explanation:

The total nutrient admixture (TNA) should be discarded if there is "cracking" of the lipid emulsion and the oil separates into a layer. With TNA, all the components of parenteral nutrition and lipids are admixed together in one container to create a 3-in-1 formula. Components of parenteral nutrition generally include proteins, carbohydrates, fats, electrolytes, vitamins, sterile water, and trace vitamins. Whereas most postoperative patients need 1500 calories per day to prevent protein breakdown, those patients with fever, burns, major surgery, trauma, or hypermetabolic disease will require additional calories.

40.

Ensuring that a patient has given informed consent and understands his or her rights and all of the risks and benefits of a procedure or treatment supports the ethical principle of:

Beneficence

Nonmaleficence

Justice

Autonomy

Explanation:

Autonomy *is the ethical principle that the individual has the right to make decisions about his/her own care. The NP must keep patients fully informed so they can exercise autonomy in informed decision making.* ***Beneficence*** *is an ethical principle that involves performing actions that are for the purpose of benefiting another person.* ***Nonmaleficence*** *is an ethical principle that means healthcare workers should provide care in a manner that does not cause direct intentional harm to the patient.* ***Justice*** *is the ethical principle that relates to the distribution of the limited resources of healthcare benefits to the members of society.*

41.

A 24-year-old patient was diagnosed with type 1 diabetes mellitus after presenting with a glucose level of 468 mg/dL (26 mmol/L), polyuria, polydipsia, and weight loss. His condition has stabilized since starting insulin injections, and the patient now appears to be able to manage the diabetes with very little insulin. The NP should suspect that the:

Patient's insulin needs will increase again

Patient will no longer need to take insulin

Patient was misdiagnosed and has type 2 diabetes

Patient's condition will remain stable at this level

Explanation:

If a 24-year-old patient diagnosed with type 1 diabetes mellitus with a glucose level of 468 mg/dL (26 mmol/L), polyuria, polydipsia, and weight loss has stabilized since starting insulin injections and now appears to be able to manage the diabetes with very little insulin, the NP should suspect that the patient's insulin needs will increase again. Symptoms of diabetes usually don't occur until about destruction of 90% of the pancreatic islet. Once stabilized, the patient often undergoes a "honeymoon" period when the remaining cells seem to produce enough insulin, but the same process of cell destruction and increased blood glucose will continue.

42.

A 16-year-old adolescent is being treated with fluoxetine (a selective serotonin reuptake inhibitor [SSRI]) and cognitive behavioral therapy (CBT) for severe anxiety and depression 6 months after the death of her mother. The girl must be monitored and regularly assessed for:

Substance abuse

Polypharmacy

Suicidal ideation

Noncompliance

Explanation:

Adolescents respond well to a combination of a selective serotonin reuptake inhibitor (SSRI) and cognitive behavioral therapy (CBT) for the treatment of depression, but SSRI use in adolescents has been associated with increased suicidal ideation, so the girl must be carefully monitored and assessed. She and her family should be educated about this possible effect and warning signs of suicidal ideation. In some cases, adolescents may be asked to sign a no-suicide contract that clearly outlines the steps to take in the event that they feel suicidal.

43.

Which of the following is an example of therapeutic communication?

"You should try not to worry."

"Don't worry. Everything will be fine."

"Why are you so upset?"

"I'd like to hear how you feel about that."

Explanation:

"I'd like to hear how you feel" is an example of therapeutic communication that allows a patient to explore a topic. Nontherapeutic communication includes the following:

- *Meaningless clichés: "Don't worry. Everything will be fine." "Isn't it a nice day?"*
- *Providing advice: "You should…" or "The best thing to do is…." It's better when patients ask for advice to provide facts and encourage the patient to reach a decision.*
- *Asking for explanations of behavior that is not directly related to patient care and requires analysis and explanation of feelings: "Why are you upset?"*

44.

A 72-year-old female on Medicare is being discharged home with a healing burn on her left arm that she is unable to care for independently because of arthritis. She requires dressing changes every 3 days. She depends on public transportation and walks with difficulty. The bus stop is two blocks from her house. Her 12-year-old granddaughter lives with her. The best solution is:

Transferring the patient to an extended care facility

Providing treatment on an outpatient basis at the hospital clinic

Teaching the woman's 12-year-old granddaughter to do the dressing changes

Making a referral to a home health agency to provide in-home care

Explanation:

The best solution is a referral to a home health agency to provide in-home care because this ensures that the woman will receive skilled nursing care and be able to stay at home and supervise her granddaughter. A 12-year-old child is too young for the responsibility for wound care. The patient's dependence on public transportation and difficulty walking preclude outpatient care. Home health care is a more cost-effective solution than transferring the patient to an extended care facility, which would leave the granddaughter without care. Medicare will not pay for extended hospital care for healing wounds.

45.

A patient has a long leg cast and requires assessment to ensure the cast is not restrictive. The 5 Ps of neurovascular assessment include (1) pain, (2) pallor, (3) pulselessness, (4) paresthesia, and (5):

Paraplegia

Pallesthesia

Paralysis

Pathology

Explanation:

If a patient has a long leg cast and requires assessment to ensure that the cast is not restrictive, the 5 P's assessment include the following:

The 5 P's of neurovascular assessment

Pain	*Determine the site, extent, duration, changes.*
Pallor	*Evaluate overall color and color distal to injuries, casts. Pallor or cyanosis indicates impaired circulation or venous stasis.*
Pulselessness	*Assess distal pulses and compare to other pulses. A weak or absent pulse may indicate impaired circulation.*
Paresthesia	*Assess for tingling, numbness, or other abnormal sensations because these many indicate nerve damage or compartment syndrome.*
Paralysis	*Assess for motion distal and proximal to cast because the inability to move may also indicate nerve damage or compartment syndrome.*

46.

In conducting evidence-based research, which of the following types of studies represents one in which those with a condition (such as infection) are compared to those without the condition?

Retrospective cohort study

Prospective cohort study

Case control study

Cross-sectional study

Explanation:

Case control studies compare those with a condition (cases) to a group without (controls) to determine if the affected group has characteristics that are different. Prospective cohort studies choose a group of patients without disease, assess risk factors, and then follow the group over time to determine (prospect for) which ones develop disease. Retrospective cohort studies are initiated after a condition develops and data are collected retrospectively from medical records to evaluate whether members of the cohort selected had exposure and developed disease. Cross-sectional studies assess disease and exposure at the same time in a target population, evaluating the presence of disease at a point in time.

47.

A 42-year-old woman is receiving end-of-life care for stage 4 breast cancer. She has developed a pronounced bronchial death rattle, which is very distressing to her adolescent daughter and son. Death is expected within a few hours. Which of the following treatments is most indicated to relieve the death rattle?

Glycopyrrolate or atropine subcutaneously (subQ)

Morphine sulfate subQ

Hyoscine hydrobromide (scopolamine) transdermal patch

Oropharyngeal suctioning

Explanation:

Glycopyrrolate or atropine subcutaneously (subQ) has a rapid onset of action (about 1 minute). Glycopyrrolate provides stronger action. Morphine sulfate may reduce respiratory distress but does not generally affect death rattles. The hyoscine hydrobromide (scopolamine) transdermal patch has a slow onset of action (about 12 hours), so it is best used for long-term treatment. Oropharyngeal suctioning may relieve rattles originating in the oropharynx but is ineffective for pooling of fluids in the bronchi.

48.

A 68-year-old male has an asynchronous pacemaker and has been experiencing cardiac palpitations, headache, and anxiety, general malaise, pain in the jaw and chest, and unexplained weakness with pulsations evident in the neck and abdomen. The most likely cause is:

Broken pacemaker wires

Dislodging of pacemaker wires

Myocardial infarction

Pacemaker syndrome

Explanation:

The following symptoms are consistent with pacemaker syndrome:

Mild

- *Pulsations evident in the neck and abdomen.*
- *Cardiac palpitations.*
- *Headache and feeling of anxiety.*
- *General malaise and unexplained weakness.*
- *Pain or "fullness" in jaw, chest.*

Moderate

- *Increasing dyspnea on exertion with accompanying orthopnea.*
- *Dizziness, vertigo, increasing confusion.*
- *Feeling of choking.*

Severe

- *Increasing pulmonary edema with dyspnea even at rest and crackling rales.*
- *Syncope.*
- *Heart failure.*

49.

Using the average cost of a problem and the cost of intervention to demonstrate savings is a(n):

Cost-benefit analysis

Efficacy study

Product evaluation

Cost-effectiveness analysis

Explanation:

A cost-benefit analysis uses the average cost of a problem (such as wound infections) and the cost of intervention to demonstrate savings. For example, if a surgical unit averaged 10 surgical site infections annually at an additional average cost of $27,000 each, the total annual cost would be $270,000. If the total cost for interventions, (new staff person, benefits, education, and software) totals $92,000, and the goal is to reduce infections by 50% (5 × $27,000 for a total

projected savings of $135,000), the cost benefit is demonstrated by subtracting the proposed savings from the intervention costs ($135,000–$92,000) for a savings of $43,000 annually.

50.

A retrospective attempt to determine the cause of an event, often a sentinel event such as an unexpected death, is:

The *t*-test

Regression analysis

The tracer methodology

Root cause analysis

Explanation:

Root cause analysis is a retrospective attempt to determine the cause of an event. Regression analysis compares the relationship between two variables to determine if the relationship correlates. The t-test is used to analyze data to determine if there is a statistically significant difference in the means of two groups. The t-test looks at two sets of things that are similar, such as exercise in women older than 65 with cancer and without cancer. The tracer methodology is a method that looks at the continuum of care a patient receives from admission to post discharge.

51.

A 62-year-old patient is diagnosed with active pulmonary tuberculosis (TB). Active pulmonary TB is characterized by which of the following?

High fever, cough, diaphoresis

Fatigue, high fever, weight gain

Chest pain, diaphoresis, malaise

Night sweats, cough, low-grade fever

Explanation:

Active pulmonary tuberculosis (TB) is characterized by night sweats, cough, and low-grade fever. Cough usually persists for 3 weeks or longer and may be nonproductive or mucopurulent. As TB progresses, hemoptysis may occur. Night sweats are frequent and pronounced. Patients also have fatigue, weight loss, and anorexia. Patients may have chest pain and pain on coughing. Extrapulmonary manifestations may result in meningitis, scrofula of the neck, TB pleurisy, miliary TB, Pott's disease (bones and spine), and urogenital TB.

52.

As the leader of an interdisciplinary team, the NP notes that one team member who has worked on the unit for more than 20 years frequently criticizes younger and less experienced nurses. The best initial approach to resolve this is to:

Ask the experienced nurse to serve as a mentor

Ask the experienced nurse to be more patient and supportive

Tell the experienced nurse that the behavior is detrimental to the team

Suggest that the experienced nurse transfer to a different team

Explanation:

If, as leader of an interdisciplinary team, the NP notes that one team member who has worked on the unit for more than 20 years frequently criticizes younger and less experienced nurses, the best initial approach to resolve this is to ask the experienced nurse to serve as a mentor. This shows recognition of the nurse's skills and may help to alleviate some anxiety the nurse may have about being displaced by younger nurses.

53.

The three elements that the Quality and Safety Education for Nurses (QSEN) initiative focuses on include (1) knowledge, (2) skills, and (3):

Roles

Attitudes

Certification

Responsibilities

Explanation:

The purpose of the Quality and Safety Education for Nurses (QSEN) initiatives is to ensure that quality and safety competencies are incorporated into the education of nurses. The three elements that QSEN focuses on are (1) knowledge, (2) skills, and (3) attitudes (KSA). Nurses are encouraged to review standards and nursing practice and to find better ways to deliver safe and effective care. QSEN includes six components: patient-centered care, teamwork and collaboration, evidence-based practice, safety, quality improvement, and informatics.

54.

If a patient is prescribed five different medications, the chance for drug interactions because of polypharmacy is approximately:

10%

25%

50%

100%

Explanation:

If a patient is prescribed five different medications, the chance of drug interactions because of polypharmacy is approximately 50%. Although the risk for drug interactions is only 6% if a patient takes two drugs, the more drugs a patient takes, the more the risk increases. Those patients taking eight drugs have about a 100% chance of drug interactions. For this reason, it's

important to carry out drug reconciliation at each visit and to carefully consider previous prescriptions when ordering new drugs.

55.

A 36-year-old woman comes to the emergency department complaining of vaginal discharge that started two days prior to the expected onset of menstruation. The findings consistent with vaginal candidiasis include:

Vaginal pain and purulent discharge

Vaginal itching and watery, foul-smelling discharge

Urinary frequency, vaginal pain, and foul-smelling discharge

Vaginal itching and thick, white, adherent discharge

Explanation:

If a 36-year-old woman comes to the emergency department complaining of vaginal discharge that started two days prior to the expected onset of menstruation, the findings consistent with vaginal candidiasis include severe vaginal and vulvar itching and thick, white, adherent (cottage-cheese-appearing) discharge. Candidiasis is common shortly before menstruation because the vaginal pH falls. Onset is usually rapid. Patients who are immunocompromised are at increased risk of developing vaginal candidiasis. Treatment includes oral fluconazole or topical regimens (including clotrimazole and miconazole).

56.

The NP has been teaching an Asian patient how to manage her diabetes, including taking blood glucose readings and administering insulin. However, the patient asks no questions, and when the NP asks the patient if she understands, the patient always says "Yes," even though she seems quite confused with the procedures. The primary problem probably is:

The patient is too confused to respond appropriately

The patient's response is culturally different from what the nurse expects

The patient doesn't want to hurt the nurse's feelings

The patient is afraid of the nurse

Explanation:

The patient's response is probably culturally different from what the nurse expects. Nurses and doctors are viewed with respect, so traditional Asian families may expect the nurse to remain authoritative and to give directions and may not question authority. The nurse should ensure that Asian patients understand by having them review material or give demonstrations and should provide explanations clearly, anticipating questions that the family might not articulate. Disagreeing is considered impolite. "Yes" may only mean that the person is heard, not that there is agreement with the person; therefore, patients and their families may indicate that they understand even when they clearly do not to avoid offending the nurse.

57.

When instituting suicide precautions, which patient is likely at highest risk?

A 15-year-old girl who overdosed on aspirin and then told her best friend

A 50-year-old woman who overdosed on pills and alcohol while her family was present

A 26-year-old man who threatened to jump out of a second-story window

A 38-year-old man who shot himself in the chest while alone at home

Explanation:

The patient most likely at risk is the man who shot himself in the chest while alone. A suicide risk assessment should evaluate some of the following criteria: Would the individual sign a contract for safety? Is there a suicide plan? How lethal is the plan? What is the elopement risk? How often are the suicidal thoughts, and has the person attempted suicide before? High-risk findings include the following:

- *Violent suicide attempt (knives, gunshots).*
- *Suicide attempt with a low chance of rescue.*
- *Ongoing psychosis or disordered thinking.*
- *Ongoing severe depression and feeling of helplessness.*
- *History of previous suicide attempts.*

- *Lack of social support system.*

58.

Cushing's triad (hypertension, bradycardia, and widening pulse pressure) in patients with increased intracranial pressure from a traumatic brain injury may be a sign of:

Brain herniation

Subdural hematoma

Impending seizures

Cerebral infection

Explanation:

Cushing's triad (hypertension, bradycardia, and widening pulse pressure) in patients with increased intracranial pressure from a traumatic brain injury may be a sign of brain herniation. Cushing's triad is always an indication of very poor prognosis and may result from severe hemorrhage or a large-space-occupying tumor. Brain (or cerebral) herniation means that the brain tissue shifts from its normal position, so various parts of the brain may be involved, and the shift can be upward, downward, or lateral.

59.

Fifteen hours after a patient was involved in an automobile accident, the patient presents in the emergency department with abdominal discomfort and a positive Cullen's sign (bruising about the umbilicus). The NP should suspect:

Ruptured spleen

Retroperitoneal bleeding

Hepatic laceration

Ruptured diaphragm

Explanation:

If 15 hours after a patient was involved in an automobile accident the patient presents in the emergency department with abdominal discomfort and a positive Cullen's sign (bruising about the umbilicus), the NP should suspect retroperitoneal bleeding or hemoperitoneum. This sign is usually not evident for about 12 hours. Other indications include a positive Grey Turner's sign (bruising over the flank). The patient may also have hematuria and hemodynamic instability.

60.

The first step in diagnosing an acid-base disturbance is to:

Evaluate pCO_2

Evaluate HCO_3

Evaluate pO_2

Evaluate pH

Explanation:

The first step in diagnosing an acid-base disturbance is to evaluate the pH, using 7.4 as the starting point (the normal range is from 7.35 to 7.45). If the pH is less than 7.4, it is becoming more acidotic, and if the pH is greater than 7.5, it is becoming more alkalotic. Next, the pCO_2 is evaluated because high levels indicate acidosis and low levels indicate alkalosis. Then the HCO_3 is evaluated, with high levels indicating alkalosis and low levels indicating acidosis. Next, evaluate the pH in relation to CO_2 and HCO_3 to determine respiratory or metabolic alkalosis or acidosis. Last, evaluate for compensation.

61.

If using the PQRST method to assess a patient's chest pain (Precipitating events, Quality of pain/discomfort, Radiation of pain, Severity of pain, and T…), the "T" stand for:

Timing

Tachycardia

Temperature

Transmission

Explanation:

The PQRST method to assess chest pain is described as follows:

- ***P****recipitating events: Exercise, emotions, rest, eating.*
- ***Q****uality of pain/discomfort: Dull, sharp, aching, restricting, crushing, suffocating.*
- ***R****adiation of pain: upper chest, mid-chest, neck, shoulders, arms, back.*
- ***S****everity of pain: Scale of 1–10.*
- ***T****iming: Time of onset, changes since onset, history of previous episodes.*

Chest pain indicates risk of heart attack, and many patients do not experience symptoms such as chest pain until their coronary arteries are 70% occluded, even though a 50% occlusion is significant in terms of morbidity/mortality.

62.

Following gastric bypass surgery that includes removal of the pyloric valve, dumping syndrome is often precipitated by:

High-protein diets

Overeating

High-sugar (carbohydrate) foods

Fatty foods

Explanation:

Following gastric bypass surgery that includes removal of the pyloric valve, dumping syndrome is often precipitated by high-sugar (carbohydrate) foods, such as candy, desserts, pasta, and fruit. Food and gastric juices move rapidly from the stomach into the intestines because the valve is missing. Symptoms usually occur within 30 minutes of ingestion and include nausea, vomiting, abdominal pain/cramping, distension, diarrhea, tachycardia, and dizziness. Similar

symptoms may occur 1 to 3 hours after eating, in addition to diaphoresis, weakness, fatigue, tremors, anxiety, and mental confusion. Increased insulin levels may cause hypoglycemia.

63.

When examining a patient's breasts for masses, the NP is aware that the most common site for breast cancer is in the:

Upper medial quadrant of the breast

Upper lateral quadrant of the breast

Lower medial quadrant of the breast

Lower lateral quadrant of the breast

Explanation:

When examining a patient's breasts for masses, the NP is aware that the most common site for breast cancer is the upper lateral quadrant of the breast.

Incidence by area of the breast:

- *Upper medial quadrant: 15%.*
- *Upper lateral quadrant: 55%.*
- *Lower medial quadrant: 5%.*
- *Lower lateral quadrant: 10%.*
- *Areola/Nipple: 15%.*

Breast abnormalities that may indicate breast cancer include masses, skin dimpling, changes in texture or color of the skin, change in nipple appearance, and clear or sanguineous discharge from the nipple.

64.

About 70% of cervical cancer cases are linked to a history of:

Human immunodeficiency virus (HIV) infection

Obesity

Multiparity

Human papilloma virus (HPV)

Explanation:

About 70% of cervical cancer cases are linked to a history of human papilloma virus (HPV), even though many people with HPV infection are asymptomatic. Recent studies indicate that approximately 69% of Americans have been infected with HPV. The strains that are most likely to cause cancer are HPV-16 and HPV-18. HPV vaccinations are available and are recommended for children at ages 11 or 12, but if someone is not vaccinated as a child, the vaccinations are recommended for females through age 26 and males through age 21 to 26, depending on risk factors.

65.

The NP overhears a nurse complain that if the hospital treats an uninsured homeless patient, it will be overwhelmed with many more homeless patients and go bankrupt. What type of logical fallacy does this represent?

Slippery slope

Overgeneralization

Post hoc

Hasty generalization

Explanation:

If the NP overhears a nurse complain that if the hospital treats an uninsured homeless patient, it will be overwhelmed with many more homeless patients and go bankrupt, the type of logical fallacy this represents is the slippery slope. The slippery slope is the assumption that one action (treating the uninsured homeless patient) will lead to a chain of events (many more homeless patients) that culminate in disaster (bankruptcy).

66.

A patient who has taken opioids for pain for a prolonged period complains that the drugs are less effective. The adaptive state in which the effects of opioid drugs diminish over time is:

Physical dependence

Psychological dependence

Opioid tolerance

Drug interaction

Explanation:

If a patient who has taken opioids for pain for a prolonged period complains that the drugs are less effective, the adaptive state in which the effects of the drugs diminish over time is opioid tolerance. As patients develop tolerance, they may need higher doses of medication to achieve the same results, but this can lead to increasing physical and psychological dependence, so the patient may need to be referred to a pain specialist to learn alternate means of controlling pain.

67.

If a patient with a head injury has a slightly elevated intracranial pressure (ICP) but develops a high fever, the NP expects the fever to:

Decrease ICP and cerebral perfusion pressure (CPP)

Increase ICP and CPP

Increase ICP and decrease CPP

Decrease ICP and increase CPP

Explanation:

If a patient with a head injury has a slightly elevated intracranial pressure (ICP) but develops a high fever, the NP expects the fever to increase both the ICP and the cerebral perfusion pressure (CPP) because the fever increases the metabolic rate and causes vasodilation. Fever is

common after brain injury and may be directly related to the neurologic injury because other causes are often not found. Fever elevation of even 1 °C must be treated aggressively with acetaminophen, cooling blankets, and cold infusions if necessary.

68.

Fifteen hours after a patient was involved in an accident that resulted in a comminuted fracture of the femur, the patient exhibits increasing dyspnea and tachypnea as well as confusion, difficulty speaking, and a petechial rash in the mouth and upper body. The most likely cause of this triad of symptoms is:

Pulmonary embolism

Fat embolism syndrome

Pneumonia

Stroke

Explanation:

If 15 hours after a patient was involved in an accident that resulted in a comminuted fracture of the femur the patient exhibits increasing dyspnea and tachypnea as well as confusion and difficulty speaking and a petechial rash in the mouth and upper body, the most likely cause of this triad of symptoms is fat embolism syndrome. Fat emboli enter the bloodstream and lodge in the lungs where platelets, red blood cells, and fibrin adhere to them, leading to respiratory distress syndrome. They can migrate to the skin (causing petechiae) and to the brain (causing central nervous system [CNS] problems).

69.

Which of the following heart conditions results in stiffened heart muscles that cannot contract adequately?

Myocarditis

Hypertrophic cardiomyopathy

Dilated cardiomyopathy

Restrictive cardiomyopathy

Explanation:

Restrictive cardiomyopathy is a heart condition in which stiffened heart muscles cannot contract adequately. Although the ability to contract and the thickness of the myocardial wall remains normal, the heart is unable to relax enough to fill the ventricles with blood, so the blood backs up into the atria, resulting in increased peripheral and pulmonary edema. Fainting is often the first symptom, and sudden cardiac arrest may occur. Restrictive cardiomyopathy is usually more severe with childhood onset.

70.

Which of the following should be screened for hepatitis C?

Adults born from 1945 through 1965

All patients with kidney disease

Anyone who received blood after 1992

All healthcare workers

Explanation:

The Centers for Disease Control and Prevention (CDC) recommends that the following people should be screened for hepatitis C:

- *People born from 1945 through 1965.*
- *People with medical conditions such as HIV/AIDS and chronic liver disease.*
- *People who have ever injected drugs or shared needles even once.*
- *People whose liver tests are abnormal.*
- *People who received donated organs or blood prior to 1992.*
- *Healthcare workers who experienced exposure to blood (needlestick or other injury).*
- *All patients receiving hemodialysis.*
- *All people born to a mother infected with hepatitis C.*

Note: People often do not show symptoms until the disease is advanced.

71.

Which of the following findings on a urinalysis may indicate a urinary tract infection?

SpGr 1.020

Urobilinogen 0.4 units

Glucose, negative

pH 8.1

Explanation:

The pH of urine usually ranges from 4.5 to 8 (average 5 to 6). Some medications may make urine more acidic (<7 pH), such as Mandelamine and vitamin C, and some foods, such as cranberries. If the urine is alkaline (>7 pH), this may indicate bacteriuria, urinary tract infections, as well as kidney and respiratory diseases. Urine may appear cloudy with infection, and bacteria in the urine may give the urine a foul odor. Culture and sensitivity are done to identify infective agents.

72.

If a patient is on the National Dysphagia Diet 1 (NND1 Dysphagia—pureed) diet, which of the following foods would be excluded?

Scrambled eggs

Pureed meats

Mashed potatoes

Ice cream

Explanation:

If a patient is on the National Dysphagia Diet 1 (NND1) (Dysphagia—pureed) diet, foods that would be excluded include scrambled eggs, peanut butter, gelatin, yogurt with fruit (unless it is smooth and completely blended), and cottage cheese. The patient is allowed food with no lumps with the consistency of smooth pudding. These foods can include pureed meats, fruits, vegetables, soups, smooth mashed potatoes, ice cream, and puddings. Foods must be pureed with sufficient broth/liquid so they don't adhere to the patient's mouth.

73.

Which of the following findings indicates that a patient needs an X-ray to evaluate a probable fractured knee?

Inability to flex more than 90°

Inability to take four steps or bear weight

Limping when walking

Swelling around the knee

Explanation:

If a patient is unable to take four steps or bear weight on an injured knee, this likely indicates the need for an X-ray to evaluate a probable fracture. Other indications include age over 55, isolated tenderness of the patella, and tenderness at the head of the fibula. With a fractured knee, the patient is not able to flex the knee to 90°. Fractures should be suspected with open wounds or major soft-tissue trauma.

74.

A patient with rheumatoid arthritis (RA) complains of dry eyes, dry mouth, dry lips, and increasing dysphagia. The extra-articular manifestation of RA that the NP should suspect is:

Caplan syndrome

Felty syndrome

Sjogren's syndrome

Amyloidosis

Explanation:

If a patient with rheumatoid arthritis (RA) complains of dry eyes, dry mouth, dry lips, and increasing dysphagia, the extra-articular manifestation of RA that the NP should suspect is Sjogren's syndrome. This is an autoimmune disorder occurring in 10 to 15% of patients with RA. Antibodies attack primarily the lacrimal and salivary glands, although in some cases other glands, such as those lining the breathing passages and the vagina, may also be involved.

75.

A 60-year-old female patient diagnosed with nonalcoholic fatty liver disease is obese and has metabolic syndrome. The NP should advise the patient to:

Gradually lose 10% of body weight

Avoid all alcohol

Rapidly lose at least 20 pounds

Restrict sodium and fluid intake

Explanation:

Nonalcoholic fatty liver disease occurs when fat is deposited in the liver and can eventually lead to scarring and cirrhosis. The most common risk factors are diabetes mellitus type 2, obesity, insulin resistance, and metabolic syndrome. The first-line treatment is to encourage the patient to gradually lose 10% or more of his or her body weight, but some improvement may be realized with a 3% to 5% loss. The patient should be counseled in healthy eating and exercise habits.

76.

If the NP is sexually harassed by a member of the medical staff in an episode witnessed by three coworkers, but the coworkers say they do not want to be involved when the NP documents the harassment in an incident report, the most appropriate action is to:

Not file the incident report

File the incident report with no reference to witnesses

File the incident report and list witnesses

Complain to a supervisor without documenting the incident

Explanation:

If the NP is sexually harassed by a member of the medical staff in an episode witnessed by three coworkers, but the coworkers say they do not want to be involved when the NP documents the harassment in an incident report, the most appropriate action is to file the incident report and list witnesses. Sexual harassment is illegal, and, should the case go to court, coworkers may not be willing to commit perjury even though they were willing to overlook the abuse.

77.

A 38-year-old male patient comes to the emergency department with severe left flank pain from a kidney stone. The priority treatment should be to:

Strain the urine

Administer analgesia

Increase hydration

Administer a beta-blocker

Explanation:

If a 38-year-old male patient comes to the emergency department with severe left flank pain from a kidney stone, the priority treatment should be to administer analgesia. An alpha-blocker, such as tamsulosin, may also be administered to help to relax the distal ureter and promote passage of the stone. Patients who are to undergo surgical removal are kept on a nothing-by-

mouth (NPO) status until after the procedure; otherwise, patients are advised to increase hydration to 3 to 4 L daily.

78.

A patient with a history of alcoholism complains of problems with sleep. Which of the following is true about alcohol and sleep disturbance?

Patients tend to sleep more at night but are sleepy during the daytime

Sleep is severely disrupted, and patients may only sleep for short periods

Patients experience adequate total sleep time but inadequate rapid-eye-movement (REM) sleep

Sedation occurs early with acute intoxication but is later replaced with increased wakefulness and restlessness

Explanation:

Patients with a history of alcoholism often have poor quality sleep and restlessness for weeks or years even after stopping drinking. With alcohol, sedation occurs early with acute intoxication but is later replaced with increased wakefulness and restlessness. Excessive alcohol may also worsen symptoms of obstructive sleep apnea or central sleep apnea. In fact, people with no signs of sleep apnea may exhibit episodes of obstructive sleep apnea after heavy drinking because breathing is more shallow and slower and the muscles of the throat are relaxed.

79.

Two staff nurses in the acute care unit disagree about the best way to carry out their duties, resulting in ongoing conflict and refusal to work together. The first step in resolving this conflict is to:

Allow both individuals to present their side of the conflict without bias

Encourage them to reach a compromise

Tell them they are violating professional standards of conduct

Make a decision about the matter

Explanation:

Steps to conflict resolution include the following:

- *First, allow both sides to present their side of conflict without bias, maintaining a focus on opinions rather than individuals.*
- *Encourage cooperation through negotiation and compromise.*
- *Maintain the focus, providing guidance to keep the discussions on track and avoid arguments.*
- *Evaluate the need for renegotiation, formal resolution process, or third-party involvement.*

The best time for conflict resolution is when differences emerge but before open conflict and hardening of positions occur. The NP must pay close attention to the people and problems involved, listen carefully, and reassure those involved that their points of view are understood.

80.

For which type of wound is hydrotherapy contraindicated?

Burns

Cancerous wound

Venous ulcers

Infectious wound

Explanation:

Hydrotherapy is contraindicated for venous ulcers because the warm water causes vasodilation, which may worsen the wound condition. Wounds that result from arterial insufficiency usually don't benefit from hydrotherapy. Hydrotherapy may be used with diabetic ulcers, but care must be taken to monitor the temperature carefully because the patient may be insensitive to heat because of neuropathy. Hydrotherapy is most often used to treat large wounds, such as burns, but cross-contamination may occur if the equipment is not thoroughly disinfected. The water temperature should be 37 °C (98.6 °F).

81.

Which of the following topical medications may be prescribed to treat a patient's burns and is effective against Gram-positive organisms?

- **Silver sulfadiazine**
- Cadexomer iodine
- Polymyxin B
- Mupirocin

Explanation:

Silver sulfadiazine (2%–7%) is frequently used to treat burns to promote healing and prevent infection with Gram-positive organisms, such as Staphylococcus aureus, methicillin-resistant Staphylococcus aureus (MRSA), Streptococcus, and Pseudomonas. Cadexomer iodine contains beads that swell in contact with exudate, releasing iodine in the wound. Iodine is effective against numerous bacteria, viruses, and fungi. Polymyxin B is used for small cuts and wounds to protect against Gram-positive organisms. Mupirocin is also effective against Gram-positive organisms and is used to treat skin infections and nasal colonization.

82.

Which of the following dressing types should the NP advise for a full-thickness necrotic wound with a small amount of exudate?

- Hydrocolloid
- **Hydrogel**
- Alginate
- Foam

Explanation:

The NP should advise using hydrogel dressings for a full-thickness necrotic wound with a small amount of exudate. Hydrogel dressings can be used in infected and necrotic wounds if they are dry or if the exudate is minimal. Hydrogel comes in a number of different forms: paste, sheets, and packing strips. The dressings are applied directly to the wound to create moisture and autolysis. Hydrogel dressings are covered with a secondary dressing.

83.

Because of the high incidence of comorbidity, a patient who has been diagnosed with Addison's disease (primary adrenal insufficiency) should be screened for:

Aortic aneurysm

Diabetes mellitus

Lactose intolerance

Celiac disease

Explanation:

Because of the high incidence of comorbidity, a patient who has been diagnosed with Addison's disease (primary adrenal insufficiency) should be screened for celiac disease, and the opposite is also true. These two disorders have been linked, suggesting that they may share genetic traits, especially in patients who have autoimmune polyendocrine syndrome, a condition in which Addison's disease is associated with thyroid disease. People with celiac disease are intolerant to gluten and must maintain a gluten-free diet to control symptoms.

84.

If a patient is hospitalized with Guillain-Barré syndrome, the treatment of choice is:

Broad-spectrum antibiotics

Corticosteroids

Plasmapheresis or immunoglobulin therapy

Methotrexate

Explanation:

If a patient is hospitalized with Guillain-Barré syndrome, the treatment of choice is plasmapheresis or intravenous immunoglobulin therapy (high-dose IVIg). There is no cure, but these treatments do relieve symptoms and accelerate recovery. IVIg is used most frequently, but the results are similar, and there is no advantage to using both treatments. Other treatments are supportive and may include intubation and ventilation if the patient develops respiratory failure. Most patients who are hospitalized with GBS have acute respiratory distress syndrome.

85.

Patients with long-term urinary catheters are at high risk of developing resistant infections because of:

Development of biofilms in the bladder

Development of bladder ulcerations

Trauma related to catheter movement

Blockage of urinary catheters

Explanation:

Patients with long-term urinary catheters are at high risk of developing resistant infections because of the development of biofilms in the bladder. Staphylococcus aureus is particularly dangerous because it is virulent and has the ability to form biofilms, in which cells adhere to tissue and accumulate in large clusters that secrete a polysaccharide substance that protects the cells from antibiotics. Biofilms are very hard to treat because the bacteria become resistant and disperse. Urinary catheters should be used only if absolutely necessary and for the shortest possible period.

86.

In the ABCDE's of melanoma, *E* refers to:

Ecchymosis

Enlargement

Emerging lesion

Evolving changes

Explanation:

The ABCDE's of melanomas are the following:

- *Asymmetry.*
- *Borders uneven, scalloped, or notched.*
- *Color variations within a mole.*
- *Diameter is usually larger than 1/4 inch (6 mm).*
- *Evolving changes in size, shape, color, or appearance.*

Melanomas can occur anywhere on the body but are most common on the torso, head, and neck of males and the legs of females. People with dark skin may develop melanoma on the nailbeds, palms, and soles of the feet.

87.

Patients who have sickle cell disease receive hydroxyurea to:

Treat iron deficiency anemia

Decrease sickling

Prevent infection

Prevent dehydration

Explanation:

Patients who have sickle cell disease receive hydroxyurea to decrease sickling of red blood cells. It is prescribed for adults who experience three or more vaso-occlusive crises a year. Hydroxyurea stimulates production of fetal hemoglobin (because this form of hemoglobin reduces sickling) and reduces the production of reticulocytes and neutrophils, so the white

blood cell (WBC) count is lower. High WBC counts are associated with increased morbidity. Hydroxyurea may increase the risk of infection.

88.

The NP should warn a patient who is prescribed varenicline (Chantix) for nicotine dependence to be alert for:

Psychiatric symptoms/suicidal ideation

Skin irritation and itching

Excessive drowsiness

Nausea, vomiting, and diarrhea

Explanation:

The NP should warn a patient who is prescribed varenicline (Chantix) for nicotine dependence to be alert for psychiatric symptoms and suicidal ideation. Adverse effects may include depression, aggressive behavior, psychosis, mania, and anxiety. The patient may experience homicidal and suicidal ideation, so family members should be advised to be on alert for psychiatric symptoms. Patients should be closely monitored while on varenicline, which reduces withdrawal symptoms associated with smoking cessation.

89.

As part of stroke rehabilitation, the primary purpose of functional electrical stimulation devices is to:

Prevent muscular atrophy

Trigger sensory responses

Improve functional ability

Record muscle activity

Explanation:

As part of stroke rehabilitation, the primary purpose of functional electrical stimulation devices is to improve the patient's functional ability. Electrodes are placed on the skin to stimulate the nerves and cause the muscle to contract. Some devices, such as those produced by Bioness for the arm and leg, are wireless and are easily applied. Most devices have different settings so they can be adjusted for various types of repetitive exercises, such as grasping.

90.

During the initial assessment, a 75-year-old female states she has had one fall in the past 4 months but had no residual injury. What, if any, further testing is immediately indicated?

No further testing

Gait, balance, and get-up-and-go

X-ray of the hips and spine

Bone mass density testing

Explanation:

According to the American Geriatrics Society Guideline for the Prevention of Falls in Older Persons, if a patient has one fall, the patient should be assessed for gait and balance, including the get-up-and-go test in which the patient stands up from a chair without using arms to assist, walks across the room, and returns. If the patient is steady, no further assessment is needed. If the patient demonstrates unsteadiness, further assessment to determine the cause is necessary.

91.

A patient on hemodialysis has an arteriovenous fistula in the right forearm. If the patient requires a blood draw, the blood should be drawn:

From the arteriovenous fistula

Distal to the arteriovenous fistula

Proximal to the arteriovenous fistula

From the left arm

Explanation:

If a patient on hemodialysis has an arteriovenous fistula (AVF) in the right forearm and requires a blood draw, the blood should be drawn from the left arm. The extremity with the AVF or other hemodialysis vascular device should never be used for venipuncture, IV fluids, or blood pressure because it's important to maintain the integrity of the vascular access. Patients often have extensive scarring of the blood vessels, so venipuncture can be challenging.

92.

If a patient complains of sudden-onset "tearing" chest pain associated with severe back pain, the NP should suspect that the origin of the pain is:

An aortic dissection

A pulmonary embolism

Cardiovascular ischemia

The gastrointestinal (GI) system

Explanation:

If a patient complains of sudden-onset "tearing" chest pain associated with severe back pain, the NP should suspect that the origin of the pain is aortic dissection. Aortic dissection involves a tear in the aortic wall that allows blood to seep between the layers, leading to rupture. Patients may present with various types of symptoms depending on the site of the dissection and the degree. If the aortic dissection occurs in the abdominal aorta, then the pain is in the abdominal area.

93.

An 80-year-old patient with peripheral arterial disease states he has severe pain in the dorsum and toes of the right foot and toes when lying in bed at night, but the pain is relieved somewhat when he

stands up. These symptoms indicate possible:

Vascular spasms

Increasing neuropathy

Critical limb ischemia

Intermittent claudication

Explanation:

If an 80-year-old patient with peripheral arterial disease states he has severe pain in the dorsum and toes of the right foot and toes when lying in bed at night, but the pain is relieved somewhat when he stands up, these symptoms indicate possible critical limb ischemia. When lying flat, the blood pressure drops and the arteries may be almost completely occluded, but the pressure of gravity may allow some circulation (relieving pain) when the patient is standing. Surgical revascularization is usually necessary to avoid amputation.

94.

A patient with multiple sclerosis (MS) has shown steady progression of the disease since diagnosis but has periodic episodes of acute exacerbations and remissions. This type of MS is classified as:

Relapsing-remitting

Progressive relapsing

Primary progressive

Secondary progressive

Explanation:

If a patient with multiple sclerosis (MS) has shown steady progression of the disease since diagnosis but has periodic episodes of acute exacerbations and remissions, this type of MS is classified as progressive relapsing. This type affects only about 5% of patients with MS. Each exacerbation tends to be progressively more severe than the previous one, so there is a steady

progression of symptoms. Additionally, the patient tends to deteriorate to some degree between relapses.

95.

A patient asks the NP about the feasibility of traveling to a high elevation (higher than 13,000 feet) in the mountains of Colorado to stay with family members after discharge from the hospital. Which of the following conditions would preclude such travel?

Diabetes mellitus

Hypertension

Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)

Sickle cell disease

Explanation:

If a patient asks the NP about the feasibility of traveling to a high elevation (higher than 13,000 feet) in the mountains of Colorado to stay with family members after discharge from the hospital, the condition that would preclude such travel is sickle cell disease. The hypoxemia at high altitude, even above 2000 m, can precipitate an occlusive crisis or splenic crisis. Patients who must travel to a higher elevation may require oxygen during travel.

96.

A patient who has been intubated for 3 days is now extubated and breathing independently and is to begin oral fluids. The initial action should be to:

Carry out a bedside swallowing test

Offer the patient ice cubes to suck on

Begin with warm fluids, such as broth

Ask the patient for fluid preference

Explanation:

If a patient who has been intubated for 3 days is now breathing independently and is to begin oral fluids, the initial action should be to carry out a bedside swallowing test. A patient who has been intubated, especially for more than 48 hours, has an increased risk of pharyngeal dysfunction and dysphagia. The patient should be carefully observed while drinking 50 mL of water to determine if he or she chokes, coughs, or aspirates (often resulting in decreased oxygen saturation).

97.

In a patient with a proximal small-bowel obstruction with abdominal pain and distension, the NP likely will also see:

Abdominal pain and distension only

Nausea and dry heaves but no vomiting

Rapid onset of nausea and projectile vomiting of bile emesis

Gradual onset of nausea and vomiting of orange-brown, fecal-smelling emesis

Explanation:

If a patient has a proximal small-bowel obstruction with abdominal pain and distension, the NP also likely documents rapid onset of nausea and projective vomiting of bile emesis. If the obstruction is in the distal small intestine, then the nausea usually develops more slowly and the emesis tends to be orange-brown in color and with a fecal odor or fecal residue. If the obstruction results from strangulation, then emergent surgical repair is necessary, but many cases resolve with conservative treatment (IV fluids, NG tube).

98.

A homeless patient was admitted to the emergency department with an open venous stasis ulcer, which was covered with maggots, on the lower legs. The maggots likely:

Infected the ulcer

Debrided the ulcer

Expanded the ulcer

Had no effect on the ulcer

Explanation:

Although maggots are unpleasant at best, their presence in an open venous stasis ulcer on the lower leg of a homeless patient likely helped to debride the ulcer. In fact, medical maggots are FDA-approved for wound debridement, although they are infrequently used because most people find them repulsive. Maggots need a moist environment to work most effectively, so after application of maggots to a wound, saline soaks are applied and remoistened frequently. There is some risk of infection from maggots.

99.

The NP asks the patient to stick out the tongue and examines the thrust for symmetry and then asks the patient to say "light, tight, dynamite." The cranial nerve that the NP is evaluating is:

Cranial nerve IX

Cranial nerve X

Cranial nerve XI

Cranial nerve XII

Explanation:

If the NP asks the patient stick out the tongue and examines the thrust for symmetry and then asks the patient to say "light, tight, dynamite," the cranial nerve that the NP is evaluating is cranial nerve XII, the hypoglossal nerve. Abnormalities include atrophy of the tongue tissue, fasciculations, and deviation to the side of the nerve injury or paralysis.

100.

A 40-year-old patient with Huntington's disease, an autosomal dominant disorder, has three children. What percentage chance does each child have of inheriting the disorder?

25%

50%

75%

100%

Explanation:

If one parent carries the dominant mutation for Huntington's disease, an autosomal dominant disorder, and the other does not, each child has a 50% chance of having the disease. There is no carrier state without the disease. Because there is no cure for the disease, testing of children is not advised. They should be allowed as adults to decide whether or not they want genetic testing.

***N** = normal gene. **D** = dominant mutated gene.*

N** **D

***N** N N N D disease*

***N** N N N D disease*

101.

With severe heart failure, ventricular remodeling may occur with the ventricle walls thinning and enlarging, resulting in a larger ventricular capacity. This, in turn, results in:

Increased ejection fraction

Increased cardiac output

Decreased cardiac output

Fluid retention and vasoconstriction

Explanation:

With severe heart failure, ventricular remodeling (cardiac myocytes hypertrophying) may occur with the ventricle walls thinning and enlarging, resulting in a larger ventricular capacity. While the body is trying to compensate and increase cardiac output by enlarging the ventricles, the thinner walls are weaker and less able to effectively pump blood, so the ejection fraction decreases even further and the cardiac output falls. This type of pathological remodeling is not reversible.

102.

A 34-year-old patient with schizophrenia was maintained on antipsychotic drugs but stopped taking the medications and is hospitalized with both positive and negative symptoms. An example of a negative symptom is:

Flat affect

Hallucination

Delusion

Catatonic behavior

Explanation:

Negative symptoms of schizophrenia include flat affect, decreased emotional range, social isolation, poverty of speech, lack of interest, and lack of drive. Positive symptoms include delusions, hallucinations, disorganized or catatonic behavior, and disorganized speech. Patients with schizophrenia are usually oriented to person, place, and time, but their behavior may range widely. Some patients may exhibit unusual or atypical behavior, such as hoarding and water intoxication. Some may exhibit motor abnormalities, such as posturing or ritualistic behaviors.

103.

The standard triple therapy for *Helicobacter pylori*-associated peptic ulcer disease includes a proton pump inhibitor two times a day (BID), clarithromycin 500 mg BID, and:

Bismuth subcitrate potassium 140 mg qd

An H_2 receptor antagonist

Amoxicillin 1 g BID

Misoprostol 200 mcg QID

Explanation:

The standard triple therapy for Helicobacter pylori-associated peptic ulcer disease includes a proton pump inhibitor two times a day (BID), clarithromycin 500 mg BID, and amoxicillin 1 g BID. Metronidazole 500 mg BID may be substituted for amoxicillin for those with penicillin allergy. Treatment is usually continued for 10 to 14 days. Using two antibiotics is especially important because of the increasing incidence of resistant strains. The standard triple therapy is most commonly used, but a standard quadruple therapy and sequential quadruple therapy may also be considered.

104.

Immigrants from which of the following countries are most at risk of having Chagas disease?

Brazil

Mexico

Philippines

Vietnam

Explanation:

Immigrants from Mexico are most at risk of having Chagas disease, which is frequently undiagnosed because of unfamiliarity with the disease. The disease is spread when a triatomine ("assassin" or "kissing") bug that is infected with Trypanosoma cruzi infects a human through feces deposited near a bite, allowing parasites in the feces to enter the body. Only about 1% of those infected show acute flu-like symptoms. Some may develop myocarditis,

hepatomegaly, and splenomegaly. Chronic disease is characterized by cardiac disease, megaesophagus, and megacolon.

105.

Symptoms that are common to patients with a tumor in the cerebellum include:

Changes in mood and personality

Lack of coordination and balance

Visual and auditory hallucinations

Blurred vision and diplopia

Explanation:

Symptoms that are common to patients with a tumor in the cerebellum include lack of coordination and balance. Patients may first notice ataxia and incoordination of the muscles before other symptoms. Because of increased intracranial pressure, patients may experience nausea and vomiting, especially in the morning and at night, as well as headache. Patients may experience increasing fatigue and lethargy. Diagnosis of a brain tumor is confirmed with neurological exam and magnetic resonance imaging (MRI).

106.

Following a bout of West Nile Fever, the symptom that is likely to persist for the longest period is:

Fatigue

Headache

Fever

Muscle weakness

Explanation:

Following a bout of West Nile fever, the symptom that is likely to persist for the longest period is fatigue, usually up to a month or longer. West Nile fever occurs in about 20% of those infected and lasts for up to 6 days. Onset is usually sudden with fever, nausea, vomiting, muscle aches, and enlarged lymph glands. A maculopapular rash on the trunk develops 3 to 7 days after onset of symptoms. West Nile-associated encephalitis and/or meningitis may also occur with severe neurological symptoms, including flaccid paralysis.

107.

A patient has returned from a trip to Africa with symptoms of malaria. The classic cycle of symptoms for uncomplicated malaria include:

Headache stage, fever, stage, chill stage

Fever stage, jaundice stage, and hepatosplenomegaly stage

Headache stage, fever stage, nausea stage

Cold stage, hot stage, sweating stage

Explanation:

If a patient has returned home from a trip to Africa with symptoms of uncomplicated malaria, the stages would include the following:

- *Cold stage: Chills, shivering.*
- *Hot stage: Fever up to 41 °C (105.8 °F), headaches, flushed skin, vomiting, seizures.*
- *Sweating stage: Diaphoresis and then rapid return to normal temperature, weakness.*

These symptoms may not be obvious at the onset of the disease but usually develop over the next 6 to 10 hours and may not appear in an exact rotation. Some patients may develop muscle aches and diarrhea as well.

108.

Medications that can cause an increased risk of osteoporosis include:

Corticosteroids

Bisphosphonates

Beta blockers

Fluoroquinolones

Explanation:

Medications that can cause an increased risk of osteoporosis include corticosteroids. Doses greater than 2.5 mg per day of oral prednisone or equivalent increase risk. Some anticonvulsants, excessive thyroid hormones, chemotherapy used for the treatment of cancer such as methotrexate, antacids that contain aluminum hydroxide, cyclosporine, and heparin all increase the risk of developing osteoporosis. Some chronic diseases also increase the risk of osteoporosis, including rheumatoid arthritis, hyperthyroidism, Cushing's syndrome, Addison's disease, and hyperparathyroidism.

109.

If a patient is hospitalized with heat exhaustion, how much of the total water depletion should be replaced with rehydration within the first 3 to 6 hours?

100%

75%

50%

25%

Explanation:

If a patient is hospitalized with heat exhaustion, 50% of the total water depletion should be replaced within the first 3 to 6 hours with the remaining replaced over the next 6 to 9 hours. For mild cases, oral rehydration with 0.1% isotonic sodium chloride solution should be given at the rate of 4 ounces every 15 to 20 minutes, but IV fluids will be needed for more severe cases. Water depletion is most common in elderly patients or with those who are physically active (such as runners) in hot weather but are not drinking enough water.

110.

A patient is experiencing an acute episode of asthma and is anxious, sitting in the tripod position with audible wheezing resulting from an upper airway obstruction. The patient's peak flow is 65% of normal, and oxygen saturation is 92%. The initial rescue protocol should begin with:

Albuterol

Prednisone or methylprednisolone

An antihistamine, such as diphenhydramine

Theophylline

Explanation:

If a patient experiencing an acute episode of asthma is anxious, sitting in the tripod position with audible wheezing resulting from an upper airway obstruction with a peak flow of 65% of normal and oxygen saturation of 92%, the initial treatment should be the rescue protocol that generally begins with an inhaled short-acting beta-2 agonist, such as albuterol (Proventil HFA), to relax the smooth muscles. An anticholinergic, such as ipratropium bromide (Atrovent HFA), may also be given to relieve bronchospasm. If there is no improvement within 10 minutes, then a low-dose inhaled corticosteroid may be provided.

111.

Which of the following drugs are less effective for treating hypertension in African-American patients?

Angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs

Beta-blockers and diuretics

Diuretics and calcium channel blockers

Calcium channel blockers and ACE inhibitors

Explanation:

Angiotensin-converting enzyme (ACE) inhibitors and angiotensin II receptor blockers (ARBs) are less effective for treating hypertension in African-American patients, so treatment is often initiated with a diuretic or a diuretic combined with a calcium channel blocker. African-American patients are at increased risk for hypertension and diseases associated with hypertension, such as diabetes mellitus, but they tend to respond differently than Caucasians to standard treatments. The reason for this is not clear, but it may have a genetic component.

112.

A 36-year-old male patient has acute sexually transmitted epididymitis. In addition to antibiotics during the acute phase of the disease, the treatment regimen should include:

Warm compresses

Ice compresses

Scrotal support

Bed rest and scrotal elevation

Explanation:

If a 36-year-old male patient has acute sexually transmitted epididymitis, in addition to antibiotics during the acute phase of the disease, the treatment regimen should include bed rest and scrotal elevation, which may help to alleviate some of the pain. Treatment usually continues for 10 to 21 days. Sexually transmitted epididymitis is most common in males younger than age 40. Laboratory findings include elevated white blood cell (WBC) count and left shift. Gram stain may be done to isolate the pathogen for sexually transmitted disease.

113.

Norovirus may remain viable on environmental surfaces, such as furniture, for up to:

24 hours

48 hours

12 days

28 days

Explanation:

Norovirus may remain viable on environmental surfaces, such as furniture, for up to 28 days and is resistant to freezing and high heat. For this reason, outbreaks are common and may occur in healthcare facilities, especially if hand cleaning and environmental cleaning is inadequate. Some outbreaks have been traced to infected food handlers. Twenty-five strains of Norovirus can infect humans, and Norovirus is exceptionally virulent because only 10 viral particles can cause disease.

114.

With the timed up and go (TUG) test to assess ambulation and mobility, which completion time indicates an increased risk for falls?

10 seconds

8 seconds

14 seconds

5 seconds

Explanation:

Timed up and go (TUG): The patient stands from a chair with armrests, walks 3 meters, and then turns and sits back down. Those patients requiring ≥14 seconds are at risk for falls (normal is 7–10 seconds). During assessment, the patient should be carefully observed for gait abnormalities, including unsteadiness, uneven weight distribution, abnormal position of limbs, and type of gait. Gait assessment also includes the following:

- *Gait speed in 5 meters with slow gait (<0.6 m/second) predictive of functional limitations.*
- *Performance-oriented mobility assessment (POMA) tests mobility and gait under different conditions.*

115.

Recommendations for the use of restraint and seclusion in pediatric patients limit the time adolescents ages 15 to 17 should be restrained and/or secluded to no longer than:

One hour

Two hours

Four hours

Six hours

Explanation:

Adolescents ages 15 to 17 should be restrained and/or secluded for no longer than 2 hours. Restraints should be used only as a last resort in cases in which the adolescent and/or others are threatened, and the patient should be released as soon as it is healthy and safe to do so. Adolescents must be frequently monitored during the use of restraints and seclusion; pressure and unsafe holds should not be applied to adolescents in restraints.

116.

When administering platelets to a patient, the infusion should be done:

As fast as possible

As slow as possible

Over 1 to 2 hours

Over 2 to 4 hours

Explanation:

When administering platelets to a patient, the infusion should be done as fast as the patient can tolerate because platelets tend to clump together if the transfusion takes too long. Platelet concentrate is usually about 50 mL. Platelet transfusions may be given for leukemia, other malignancies, and severe thrombocytopenia. Although ABO/Rh compatibility is desired, the

number of red blood cells that remain is usually too low to cause a reaction, but Rh antibodies may form if the patient is Rh–.

117.

Which type of dementia is especially characterized by changes in personality and behavior and difficulty using and understanding language?

Alzheimer's disease

Parkinson's dementia

Normal pressure hydrocephalus

Frontotemporal dementia

Explanation:

Frontotemporal dementia (FTD) is especially characterized by changes in personality and behavior and difficulty using and understanding language. Onset is usually between ages 40 and 45, and patients may exhibit marked personality changes, including acting inappropriately and emotional blunting. There are different variants of FTD with behavioral problems more pronounced in some and language problems (production and comprehension) in others. The only treatment is supportive. FTD may be misdiagnosed as Alzheimer's disease.

118.

A 62-year-old homeless man hospitalized for pneumonia is to be discharged but has no place to go and no income. Which of the following is of primary importance in preparing for discharge?

Specific directions for medication or treatments, including side effects

Information sheets outlining signs for all risk factors

List of safe shelters and assistance in applying for welfare assistance or Social Security

Follow-up appointment dates, with physicians, labs, or other healthcare providers

Explanation:

Although all of these are important, patients who are homeless require further assistance with discharge because compliance with treatment and follow-up appointments is poor in the homeless population. Interventions that are most important include the following:

- *Lists of safe shelters and places they can go to bathe, eat, and get mail.*
- *Assistance in applying for welfare assistance or Social Security.*

Discharge planning should begin on admission and must be a joint effort so that the transfer and discharge documents provide the information that the individual needs.

119.

Drug absorption may be impaired in gerontology patients because of:

Decreased splanchnic blood flow

Body water volume fluctuations

Decreased renal blood flow

Changed hepatic volume

Explanation:

Drug absorption may be impaired in older adults because of decreased splanchnic (visceral) blood flow. Gastric acids tend to decrease and pH tends to become more acidic, and this, combined with decreased blood flow to the stomach, can reduce absorption. Slower gastric emptying can also affect absorption. The degree to which drug absorption may be affected can be difficult to predict, although blood levels of some drugs can be monitored.

120.

Which of the following findings on physical assessment are consistent with osteoarthritis?

Spindle-shaped swelling of soft tissue of proximal interphalangeal joints

Ulnar deviation of fingers

Swan-neck deformity of fingers

Hard, nontender nodules on distal and proximal interphalangeal joints

Explanation:

The finding on physical assessment that is consistent with osteoarthritis is hard, nontender nodules on distal and proximal interphalangeal joints. Those on distal interphalangeal joints are called Heberden's nodes; those on proximal interphalangeal joints are called Bouchard nodes. Spindle-shaped swelling of soft tissue of proximal interphalangeal joints, ulnar deviation of the fingers, swan-neck deformity of the fingers, as well as boutonnière deformity (with the knuckle appearing as though it was pushed through a buttonhole or a keyhole) are consistent with rheumatoid arthritis.

121.

A patient has a percutaneous endoscopic gastrostomy (PEG) and has developed leakage about the tube. What initial intervention is indicated?

Check the balloon to ensure adequate inflation

Stabilize the tube with the bumper and external stabilizer

Replace the tube

Apply a barrier ointment

Explanation:

The percutaneous endoscopic gastrostomy (PEG) tube does not have an inflatable balloon, but the tube should be stabilized by pulling gently to ensure that the internal bumper is against the abdominal wall and then sliding the external stabilizer to 1.5 cm above the skin. Replacing the PEG tube is done only if the leakage cannot be otherwise controlled. Routine skin care, including application of a barrier ointment or other skin sealant, is necessary to prevent skin breakdown. In some cases, alginates, foam dressing, gauze, or pouching may be necessary.

122.

For which of the following is a positive Murphy's sign an aid in diagnosis?

- **Differentiating cholecystitis from choledocholithiasis**
- Diagnosing cholecystitis in geriatric patients
- Diagnosing pancreatitis
- Differentiating ascending cholangitis from pancreatitis

Explanation:

*A positive **Murphy's sign** is indicative of cholecystitis but is negative with choledocholithiasis and ascending cholangitis. This test is not accurate for geriatric patients, so a negative finding does not rule out cholecystitis for these patients. To test for Murphy's sign, hook the fingers under the right costal margin at the midpoint, palpating deeply and ask the patient to inhale deeply. Positive results occur with pain causing the patient to stop inspiring. **Rovsing's sign**—pain in the right lower quadrant (RLQ) when left-sided abdominal pressure is applied—suggests appendicitis along with RLQ pain (rebound tenderness) on quick removal of pressure.*

123.

A 40-year-old patient with bipolar disease has been well controlled with lithium, but she comes to the emergency department with influenza that has caused 2 days of severe vomiting and diarrhea. In response to the bipolar disease, the NP's priority should be to immediately:

- Decrease the dose of lithium
- Increase the dose of lithium
- Discontinue the lithium
- **Obtain a lithium level**

Explanation:

If a 40-year-old patient with bipolar disease has been well controlled with lithium but comes to the emergency department with influenza that has caused 2 days of severe vomiting and diarrhea, the NP's priority should be to immediately obtain a lithium level. Lithium has a very narrow therapeutic range, and volume depletion resulting from nausea and/or vomiting may result in elevated serum levels, which can be life threatening. If the level drops too low (such as when the medication is vomited), then symptoms of bipolar disease may recur.

124.

A patient with burns is placed on an air-fluidized bed to relieve pressure. It is especially important to carefully monitor this patient for:

Vital signs

Fluid balance

Temperature

Pain level

Explanation:

When a patient, such as a burn patient, is placed on an air-fluidized bed, it is especially important to monitor fluid balance because he or she can easily become dehydrated. Air-fluidized beds contain a mass of fine ceramic microspheres through which warm air flows. The patient is placed on a special polyester filter sheet that allows air to pass through it. The warmth causes perspiration, which is quickly absorbed, so diaphoresis may not be evident.

125.

The Hamilton Anxiety Rating Scale (HAM-A) scores (0–4) phrases that describe:

Abnormalities

Feelings and symptoms

Desires

Likes and dislikes

Explanation:

The Hamilton Anxiety Rating Scale (HAM-A) scores phrases that describe feelings and symptoms. Scores are 0 (not present), 1 (mild), 2 (moderate), 3 (severe), and 4 (incapacitating). The phrases relate to 14 issues: anxious mood, tension, fears, insomnia, intellectual, depressed mood, somatic (muscular), somatic (sensory), cardiovascular symptoms, respiratory symptoms, gastrointestinal (GI) symptoms, genitourinary (GU) symptoms, autonomic symptoms, and behavior at the interview. HAM-A assesses the psychic anxiety and the physical complaints (somatic anxiety) related to those anxieties.

126.

When marking a nasoenteric tube for an adult patient prior to insertion for enteric feedings, what measurements are needed?

Nose to earlobe, earlobe to xiphoid process

Nose to earlobe, earlobe to xiphoid process, plus 6 inches (15 cm)

Nose to earlobe, earlobe to xiphoid process, plus 8 to 10 inches (20–25 cm)

Nose to earlobe, earlobe to xiphoid process, plus 12 to 14 inches (30–38 cm)

Explanation:

A nasoenteric tube for an adult should be marked prior to insertion with measurements including the distance from nose to earlobe, plus earlobe to xiphoid process, plus 8 to 10 inches for enteric placement. Six inches are needed for gastric placement. The nasoenteric tube tip is initially placed in the stomach (verified by chest X-ray) and then moves into the small intestine through peristalsis over about 24 hours. Proper placement should be reconfirmed before every feeding by checking the tube length measurement, aspirating and observing the aspirant, and checking pH.

127.

A 46-year-old patient with stage 2 gastric cancer refuses all treatment because of religious convictions. Which of the following is the most appropriate action?

Provide the patient with facts about the disease, treatments, and prognosis

Ask family members to intervene

Remind the patient that he will die without treatment

Refer him to a psychologist

Explanation:

Patients have a right to refuse treatment for religious or other personal reasons, so the most appropriate action is to simply provide the patient with factual information about the disease, treatments, and prognosis in a neutral manner, without trying to coerce or frighten the patient. In some cases, patients may change their minds when presented with information, but the NP should remain supportive regardless of the patient's decision. Asking the family to intervene is not appropriate, and refusal of treatment alone does not suggest the need for referral to a psychologist.

128.

A 33-year-old female is hospitalized for treatment of acute pyelonephritis and has been receiving IV fluids and ampicillin plus aminoglycoside for the past 5 days, but the patient's temperature remains elevated and she is still in pain and nauseated. The patient should likely be evaluated for:

Perinephric abscess

Pelvic inflammatory disease

Allergic reaction to drugs

Urinary tract obstruction

Explanation:

If a 33-year-old female is hospitalized for treatment of acute pyelonephritis and has been receiving IV fluids and ampicillin plus aminoglycoside for the past 5 days but the patient's temperature remains elevated and she is still in pain and nauseated, the patient should likely be

evaluated for perinephric abscess. With perinephric abscess, the onset of symptoms is usually slower than with other acute pyelonephritis, and fever often persists for more than 4 days.

129.

A patient who suffered a stroke has persistent dysphagia and cough, and the NP is concerned that the patient may aspirate. Which of the following referrals is the most appropriate?

Physical therapist

Occupational therapist

Respiratory therapist

Speech pathologist

Explanation:

If a patient who suffered a stroke has persistent dysphagia and cough and the NP is concerned that the patient may aspirate, the most appropriate referral is to a speech pathologist. The speech pathologist is able to assess the strength of the mouth, including the lips, the tongue, the palate, and the jaw. The speech pathologist may suggest preventive measures, including positioning and diet modifications, and may prescribe exercises and/or neurological stimulation or thermostimulation.

130.

The NP is working on a unit that has been understaffed. One of the nurses on the unit states that his blood pressure has increased because he dreads coming to work and feels that the organization doesn't value nurses or care about patients and that nothing will change. The NP should recognize that the nurse is most at risk for:

Workplace violence

Burnout

Accidental injury

Negligent patient care

Explanation:

If the NP is working on a unit that has been understaffed and one of the nurses on the unit states that his blood pressure has increased because he dreads coming to work and feels that the organization doesn't value nurses or care about patients and that nothing will change, the NP should recognize that the nurse is most at risk for burnout. Stages include the following:

1. *Fight-or-flight response.*
2. *Emotional reaction: anger, shock, surprise.*
3. *Negative thinking.*
4. *Physical reaction.*
5. *No change in stressor or person.*
6. *Burnout.*

131.

A 73-year-old patient is in the hospital with hypothermia because his daughter, who manages his finances, forgot to pay the heating bill, so the heat was shut off during a cold spell. This is an example of:

Physical abuse

Abandonment

Neglect

Emotional abuse

Explanation:

If a 73-year-old patient is in the hospital with hypothermia because his daughter, who manages his finances, forgot to pay the heating bill and the heat was shut off during a cold spell, this is an example of neglect. The patient's needs were not adequately met. Neglect may be intentional or accidental. Other signs of neglect may include lack of dentures, poor nutrition, weight loss, unkempt appearance, and unsanitary living conditions. Neglect may be associated with abuse as well.

132.

If the NP is promoting evidence-based practice and using the PICOT format to pose a clinical question, the NP would first focus on:

Personal interests

Philosophy of care

Placement of resources

Patient population

Explanation:

If the NP is promoting evidence-based practice and using the PICOT format to pose a clinical question, the NP would first focus on the patient population. PICOT is explained as follows:

PICOT format

Patient population	*What is the target population (adults, children, homeless) or setting (home care, inpatient, outpatient)?*
Intervention/Area of interest	*What is the potential intervention?*
Comparison	*What are other interventions?*
Outcome	*What are strategies for measuring outcomes?*
Time	*What is the time frame for intervention?*

133.

A 70-year-old female with chronic obstructive pulmonary disease (COPD) has experienced an exacerbation after contracting an upper respiratory infection. The patient's oxygen saturation level on admission is 84%. Blood gases are as follows: pH, 7.29; $PaCO_2$, 52 mmHg; PaO_2, 53 mmHg; and HCO_3, 25 mEq/L. Based on these findings, the acid-base imbalance the patient is experiencing is:

Respiratory alkalosis

Respiratory acidosis

Metabolic alkalosis

Metabolic acidosis

Explanation:

If a 70-year-old female with chronic obstructive pulmonary disease (COPD) has experienced an exacerbation after contracting an upper respiratory infection and her oxygen saturation level is 84%, pH is 7.29, $PaCO_2$ is 52 mmHg, PaO_2 is 53 mmHg, and HCO_3 is 25 mEq/L, the acid-base imbalance that the patient is experiencing is respiratory acidosis. The pH is acidotic (<7.35), the $PaCO_2$ is elevated (normal is 35 to 45 mmHg), and the PaO_2 is at the low end of normal (normal is ≥80 mmHg), indicating that the problem is respiratory in nature. The HCO_3 remains within normal range but near the upper limit (normal is 22 to 26 mEq/L). These findings indicate a sudden decrease in ventilation.

134.

The NP has been asked to serve as a coach for nurses in the medical-surgical unit. The NP's initial action should be to:

Complete a needs assessment

Announce the role

Prepare a plan of action

Ask the supervisor for guidance

Explanation:

If the NP has been asked to serve as a coach for nurses in the medical-surgical unit, then his or her initial action should be to complete a needs assessment with input from all members of the staff. The goal of coaching is to address the educational needs of the staff members, and the

needs assessment will help guide the planning process and the interventions. Coaching may also include mentoring and helping to translate evidence-based research into clinical practice.

135.

At what body mass index (BMI) are patients considered obese and should be counseled regarding diet, lifestyle choices, and weight loss goals?

≥30

≥28

≥26

≥25

Explanation:

At a body mass index (BMI) of ≥30, patients are considered obese and should be counseled regarding diet, lifestyle choice, and weight loss goals. The body mass index (BMI) is based on weight and height:

$$BMI = \frac{Weight\ in\ kilograms}{(Height\ in\ meters)^2} = \frac{(Weight\ in\ pounds) \times 703}{(Height\ in\ inches)^2}$$

BMI	*Weight status*
<18.5	*Underweight*
18.5–24.9	*Normal*
25.0–29.9	*Overweight*
30.0–34.9	*Obese*
35.0–39.9	*Severe obesity*
≥40	*Morbid obesity*

136.

A 27-year-old male patient has experienced increased thirst and frequency of urination, including nocturia. He has had an increased appetite but lost 4 pounds in the previous 2-week period. Laboratory tests show a glucose level of 526 mg/dL (29.2 mmol/L), urine positive for glucose and ketones, and an acidic blood pH of 7.22. The blood pH is the result of:

A normal finding

Increased urinary output

Increased fluid intake

Increased ketone levels in blood

Explanation:

If a 27-year-old male patient has experienced increased thirst and frequency of urination, including nocturia, increased appetite but recent weight loss, and laboratory tests show glucose of 526 mg/dL (29.2 mmol/L), the urine is positive for glucose and ketones, and a blood pH of 7.22 (normal is 7.35 to 7.45), the blood pH is the result of increased ketone levels in the blood. Because insulin supply is inadequate and the glucose level is high, the body breaks down fat to use as a source of energy. As the blood lipid level increases, these lipids are metabolized, resulting in ketones as by-products, including acetoacetic acid and beta-hydroxybutyric acid. These acidic by-products increase the acidity of the blood.

137.

A 32-year-old female reports repeated episodes of palpitation 6 to 10 times daily. The patient has experienced increased irritability, insomnia, heat intolerance, and eye irritation. The patient has lost 5 pounds in the previous month but has an increased appetite. Vital signs are BP 170/86, pulse 114, respirations 20. Temperature is 37.5 °C (99.5 °F), and the electrocardiogram (ECG) shows atrial fibrillation. Which of the following diagnostic tests are most indicated?

Renal function tests

Cardiac enzymes

Thyroid function tests

Liver function tests

Explanation:

A 32-year-old female reports 6 to 10 episodes of palpitation daily, irritability, insomnia, heat intolerance, eye irritation, and increased appetite coupled with weight loss. Her vital signs are BP 170/86, pulse 114, and respirations 20. Her temperature is 37.5 °C (99.5 °F), and an ECG shows atrial fibrillation. This patient should undergo thyroid function tests (T3, T4, and TSH) because these signs and symptoms are indicative of hyperthyroidism. Hyperthyroidism may be associated with Graves' disease (an autoimmune disorder), thyroiditis, or pituitary tumors.

138.

According to Drug Enforcement Administration (DEA) regulations for schedule II drugs, what is the refill limitation without renewal by a healthcare practitioner?

0 refills

2 refills

5 refills

12 refills

Explanation:

According to Drug Enforcement Administration (DEA) regulations for schedule II drugs, no refills are allowed, although the healthcare provider may provide a patient for multiple prescriptions for the same schedule II drug to allow a 90-day supply. However, each prescription must indicate the earliest date by which the patient can fill the prescription. Schedule II drugs include opioids and other drugs that have a high risk of abuse: cocaine, opium, morphine, methadone, Ritalin, Concerta, Focalin, oxycodone, oxymorphone, fentanyl, hydromorphone, hydrocodone (pure), codeine (≥90 mg per unit dose), secobarbital, meperidine, pentobarbital, and amphetamine.

139.

Which of the following characteristics helps to distinguish an asthma attack from a chronic obstructive pulmonary disease (COPD) exacerbation?

Asthma lacks a genetic component

Most asthma patients are smokers

Onset of asthma is usually younger than age 30

Asthma attacks respond less quickly to treatment

Explanation:

Although asthma attacks and chronic obstructive pulmonary disease (COPD) exacerbations may be difficult to distinguish based on X-rays, signs and symptoms, and laboratory tests, some characteristics can help to distinguish the two:

- *Onset of asthma is at a younger age (usually <30) than COPD, which most often occurs after age 40.*
- *Asthma attacks can usually be fairly quickly resolved with treatment, but COPD responds more slowly and often only temporarily.*
- *Asthma has a genetic component, but COPD generally does not.*
- *Asthma patients are much less likely to have been smokers, whereas almost all COPD patients have smoked.*

140.

A patient with a T-6 spinal cord injury is lying flat in bed but suddenly exhibits blurred vision, severe headache, piloerection with flushing above the lesion and pallor below, and markedly elevated BP of 280/160. The first action should be to:

Check bladder

Check bowels

Loosen clothes

Elevate the head of the bed to 45°

Explanation:

If a patient with a T-6 spinal cord injury is lying flat in bed but suddenly exhibits blurred vision, severe headache, piloerection with flushing above the lesion and pallor below, and markedly elevated BP of 280/160, the first action should be to elevate the head of the bed to 45°. Then the patient's bladder should be checked for distension or the catheter checked for kinks and distension relieved, clothes loosened, and bowels checked. If symptoms continue after the stimulus is identified and relieved, the patient may need an alpha-adrenergic blocker or vasodilator, such as nifedipine.

141.

Which of the following teaching strategies is the most efficient approach for a group of eight patients regarding the need for lifestyle changes required to manage hypertension and heart disease?

Discussion

Lecture-discussion

Role playing

Demonstration/Return demonstration

Explanation:

The teaching strategy that is the most efficient approach for a group of 8 patients regarding the need for lifestyle changes needed to manage hypertension and heart disease is lecture-discussion. This format allows the NP to provide information in a short-lecture format and then provides the patients time to ask questions and discuss the information shared. Supplemental printed materials may be provided to the patients. The NP should cover no more than 5 to 7 different topics in one session.

142.

The “talk and die” phenomenon in which a patient loses consciousness after a blow to the head and then recovers and appears to be fine before suddenly developing severe symptoms of brain injury is typical of:

- **Epidural hemorrhage**
- Subdural hemorrhage
- Intracerebral hemorrhage
- Subarachnoid hemorrhage

Explanation:

The “talk and die” phenomenon in which a patient loses consciousness after a blow to the head and then recovers and appears to be fine before suddenly developing severe symptoms of brain injury is typical of epidural hemorrhage, which is bleeding between the skull and the dura mater, resulting in compression of the underlying brain tissue. With rapid treatment, prognosis is good, but if the lesion expands rapidly, a midline shift and herniation may occur.

143.

When conducting a history and physical exam of a patient with dyspnea, the NP discovers that the patient has smoked two packs (40 cigarettes) daily for at least 15 years. How many pack-years does this represent?

- 10
- 20
- **30**
- 40

Explanation:

If, when conducting a history and physical exam of a patient with dyspnea, the NP discovers that the patient has smoked two packs (40 cigarettes) daily for at least 15 years, this represents 30 pack-years. One pack-year is equal to smoking one pack (20) of cigarettes daily for a year. The greater the number of pack-years, the higher the risk of developing COPD. Most patients

with COPD have smoked for 40 pack-years, and symptoms are not usually evident until more than 20 pack-years of smoking.

144.

If a nonverbal patient with dementia is frowning and grimacing on movement, crying out periodically, and lying rigid or in the fetal position, the NP should recognize that the patient is likely:

Hungry

Angry

Frightened

In pain

Explanation:

If a nonverbal patient with dementia is frowning and grimacing on movement, crying out periodically, and lying rigid or in the fetal position, the NP should recognize that the patient is likely in pain. Pain Assessment in Advanced Dementia (PAINAD) is a tool to help evaluate signs of pain in those with dementia through observation of respirations (increased labored), vocalizations (moaning, groaning), facial expressions (frown, grimace, sad), body language (tense, fidgeting, rigid, fetal position), and consolability.

145.

A 60-year-old African-American patient presented with a body mass index (BMI) of 32 kg/m^2, hemoglobin A1c level of 7.1, fasting serum glucose of 152 mg/dL (8.4 mmol/L), triglyceride level of 168, and high-density lipoprotein (HDL) level of 24 mg/dL. The patient is diagnosed with insulin resistance and diabetes mellitus, type 2. Which of the following is usually the drug of choice to initiate therapy?

Sulfonylureas, such as glimepiride

Biguanides, such as metformin

Meglitinides, such as repaglinide

Alpha-glucosidase inhibitors, such as acarbose

Explanation:

If a 60-year-old African-American patient has a body mass index (BMI) of 32 kg/m^2, hemoglobin A1c level of 7.1 (71 mmol/L), fasting serum glucose level of 152 mg/dL (8.4 mmol/L), triglyceride level of 168, and high-density lipoprotein (HDL) level of 24 mg/dL, and the patient is diagnosed with insulin resistance and diabetes mellitus, type 2, the drug of choice for initiating therapy is usually a biguanide, typically metformin. Metformin is usually tolerated well and does not cause hypoglycemia. If the A1c levels haven't fallen to below 7% within about 3 months, then an additional medication is prescribed.

146.

A 68-year-old patient has been treated for renal disease but has exhibited a sudden change in her condition. The primary indications for renal replacement therapy (RRT) for acute renal failure are:

Hypovolemia, metabolic alkalosis, and hypokalemia

Initial signs of oliguria

Increasing levels of serum creatinine

Fluid overload, metabolic acidosis, and hyperkalemia

Explanation:

The primary indications for renal replacement therapy (RRT) include fluid overload, metabolic acidosis, and hyperkalemia. Other indications include increased confusion, pericarditis, or gastrointestinal (GI) bleeding. Increasing oliguria and increasing serum creatinine require further evaluation and may trigger RRT to prevent further kidney damage. Intermittent hemodialysis (administered over 3–4 hours about three times weekly) and continuous venovenous hemofiltration are commonly used after cardiac surgery for patients requiring RRT. Continuous venovenous systems include slow continuous ultrafiltration (SCUF), continuous venovenous hemofiltration (CVVH), and continuous venovenous hemodiafiltration (CVVHD).

147.

Following lunch at a restaurant, a 72-year-old female experiences a sudden episode of loss of vision in the right eye. At the same time, the patient feels dizzy and weak, and her speech is slightly garbled, but the symptoms clear within 15 to 20 minutes. The most likely diagnosis is

Transient ischemic attack (TIA)

Stroke

Allergic reaction

Panic attack

Explanation:

Following lunch, if a 72-year-old female experiences a sudden episode of loss of vision in the right eye during which the patient feels dizzy and weak, and her speech is slightly garbled but the symptoms clear within 15 to 20 minutes, the most likely diagnosis is transient ischemic episode (TIE). Transient impaired vision of one eye (amaurosis fugax) is a common finding with TIE, which is often a precursor to a stroke, so the patient should undergo a complete examination.

148.

Which of the following methods of wound debridement generally should be avoided?

Sharp debridement

Irrigation

Wet-to-dry dressings

Chemical debridement

Explanation:

The method of wound debridement that should generally be avoided is wet-to-dry dressings. Although this method of debridement was in common use for many years, it actually disrupts

granulation and is no longer recommended. Various other methods of debridement, such as irrigation, chemical debridement (enzyme debriding agents), hydrotherapy (used commonly for burns), and sharp debridement, may be used depending on the extent of the wound and the presence of slough and eschar.

149.

The medical-surgical unit has experienced an outbreak of *Clostridium difficile* infections involving 10 patients over a 2-week period. In order to reduce further transmission of the infection, the NP is working with staff members and should concentrate efforts on:

- **Contact precautions/hand hygiene**
- Antibiotic stewardship
- Testing patient stool specimens
- Limiting patient contacts

Explanation:

If the medical-surgical unit has experienced an outbreak of Clostridium difficile infections involving 10 patients over a 2-week period, in order to reduce the transmission of the infection, the NP is working with staff members and should concentrate efforts on the use of proper contact precautions and hand hygiene because the infection is easily spread by contaminated hands. The spores can remain viable on environmental surfaces for long periods of time. Housekeeping procedures should also be reviewed.

150.

A 16-year-old comes to the emergency department with a sore reddened and blistering area on his left lower leg. The patient states that he believes he was bitten by a spider, but didn't actually see the spider. What differential diagnosis should the NP suspect?

- Lyme disease
- Scabies

Shingles

Staphylococcus aureus **infection**

Explanation:

If a 16-year-old comes to the emergency department with a sore reddened and blistering area on his left lower leg and the patient states he believes he was bitten by a spider but didn't actually see the spider, the NP should suspect that the patient may have a Staphylococcus aureus infection. Staph infections are frequently mistaken for spider bites and should always be considered when the spider is not observed. Additionally, many types of spider bites are not poisonous and do not cause severe reactions.

151.

A patient with heart failure has developed pulmonary edema and has an audible wheeze with rales and rhonchi present throughout the lung fields. The patient is quite anxious. The patient is initially treated with oxygen at 15 L per nonrebreather mask, furosemide 60 mg IV, as well as nitroglycerine and nitroprusside to increase peripheral vasodilation and morphine to reduce anxiety. The initial goal of therapy should be to maintain the PaO_2 at greater than:

40 mmHg

60 mmHg

70 mmHg

80 mmHg

Explanation:

If a patient with heart failure has developed pulmonary edema and has rales and rhonchi present throughout the lung fields, is very anxious, and the initial treatment includes 15 L oxygen per nonrebreather mask, furosemide 60 mg IV, nitroglycerine, nitroprusside, and morphine to reduce anxiety, the initial goal of therapy should be to maintain the PaO_2 at greater than 60 mmHg. Although the normal PaO_2 ranges from 80 to 95 mmHg, the critical value is less than 45 mmHg, at which point perfusion is inadequate.

152.

If a patient is taking atorvastatin for dyslipidemia, which of the following medications may the NP recommend for its additive effect to reduce the risk of cardiac mortality resulting from dyslipidemia?

Bile acid sequestrant

Cholesterol absorption inhibitor

Fibrate

Microsomal transfer protein (MTP) inhibitor

Explanation:

If a patient is taking atorvastatin for dyslipidemia, a bile acid sequestrant may be recommended for its additive effect to reduce the risk of cardiac mortality resulting from dyslipidemia. Bile acid sequestrants are resins that bind bile acids and prevent reabsorption and are effective in lowering low-density lipoprotein (LDL) cholesterol. They are sometimes used along with statins, whereas fibrates should be avoided because combining them with statins may result in an increased risk of rhabdomyolysis.

153.

If a patient has suspected heart failure, which of the following tests should the NP expect will show the severity of the heart failure?

C-reactive protein (CRP)

Homocysteine

Ischemia modified albumin (IMA)

B-type natriuretic peptide (BNP)

Explanation:

If a patient has suspected heart failure, B-type natriuretic peptide (BNP) is the laboratory test that will show the severity of heart failure. This hormone is secreted by ventricular tissues in response to increased volume and pressure in the ventricles, as occurs with heart failure. Normal values should be less than 100 pg/mL (100 ng/L). A level of 250 pg/mL (250 ng/L) is consistent with mild heart failure, 375 pg/mL (375 ng/L) with moderate, 650 pg/mL (650 ng/L) with moderately severe, and 800 pg/mL (800 ng/L) with severe.

154.

If the NP is using the beliefs, values, meanings, goals, and relationships (BVMGR) rubric for implementing spiritual care, these aspects apply to the:

NP

Culture

Patient

Organization

Explanation:

If the NP is using the beliefs, values, meanings, goals, and relationships (BVMGR) rubric for implementing spiritual care, these aspects apply to assessment of the patient. That is, the NP should try to understand the patient's BVMGR and should not let personal BVMGR intrude and should avoid any indication of proselytizing when the NP's BVMGR is at odds with the patient. Although the NP may not share the patient's belief system, the NP should always seek to understand and to show respect for it.

155.

A patient with pulmonary arterial hypertension (World Health Organization disease type II [WHO II]) has started treatment with combination therapy that initially includes ambrisentan 5 mg (Letairis) and tadalafil 20 mg (Adcirca) as well as supplementary oxygen for exertion. When educating the patient about disease management, the NP should tell the patient to be especially alert for signs of:

Unusual bleeding

Peripheral edema

Headache

Dizziness

Explanation:

If a patient with pulmonary arterial hypertension (World Health Organization disease type II [WHO II]) has started treatment with combination therapy that initially includes ambrisentan 5 mg (Letairis) and tadalafil 20 mg (Adcirca) as well as supplementary oxygen for exertion, when educating the patient about disease management, the NP should tell the patient to be especially alert for signs of peripheral edema, the most common adverse effect. In some cases, pulmonary edema may also occur. Diuretic therapy, such as furosemide, may be added to the regimen. The patient should also have hemoglobin levels monitored routinely because of the increased risk of anemia.

156.

If a patient with inflammatory bowel disease (IBD) has periodic bouts of severe diarrhea but is unsure of the cause, the NP should advise the patient to:

Maintain a food diary

Avoid all milk products

Increase fat in diet

Increase fiber in diet

Explanation:

If a patient with inflammatory bowel disease (IBD) has bouts of severe diarrhea but is unsure of the cause, the NP should advise the patient to maintain a food diary, writing down all food and fluid intake to see if a pattern emerges. Although many patients with IBD are lactose intolerant, testing can show if this is the problem. Increasing fat or fiber in the diet may aggravate the diarrhea.

157.

After removal of a chest tube, a 48-year-old patient complains of retrosternal and neck pain, is dyspneic, and has slight neck edema. Hamman's sign is positive (precordial systolic crepitus). The probable diagnosis is:

Pneumothorax

Cardiac tamponade

Pneumomediastinum

Pneumopericardium

Explanation:

Retrosternal and neck pain, dyspnea, and slight neck edema indicate pneumomediastinum. Hamman's sign—a precordial rasping sound heard on auscultation during heartbeat as the heart moves against tissues filled with air—is an indication of both pneumomediastinum and pneumopericardium but is not generally present with pneumothorax or cardiac tamponade. However, neck edema can occur with pneumomediastinum. Air leaks can occur from damage to the pleura during surgery or (less commonly) from obstructed chest tubes. Air leaks usually resolve within a few days but may require reinsertion of a chest tube.

158.

An alert 70-year-old female patient hospitalized with a vertebral fracture and no previous history of incontinence has started having both urinary and fecal leakage. The NP's initial response is to examine the patient for:

Urinary infection

Medication reaction

Fecal impaction

Psychological factors

Explanation:

If an alert 70-year-old female patient hospitalized with a vertebral fracture and no previous history of incontinence has started having both urinary and fecal leakage, the NP's initial response should be to examine the patient for a fecal impaction. Fecal impaction is a common cause of both urinary and fecal incontinence in patients who are hospitalized or immobile, especially if they are receiving opioids.

159.

If a patient with a latex allergy is inadvertently exposed to latex and develops severe anaphylaxis with difficulty breathing, the priority intervention is to establish an airway and administer:

Oxygen

Epinephrine

Corticosteroid

Albuterol inhaler

Explanation:

If a patient with latex allergy is inadvertently exposed to latex and develops severe anaphylaxis with difficulty breathing, the priority intervention is to establish an airway and administer epinephrine. The epinephrine should be administered intramuscularly into the vastus lateralis (thigh) muscle instead of the deltoid because absorption is more rapid. Patients should receive adjunctive therapy with an antihistamine (such as diphenhydramine), corticosteroid (to prevent a biphasic reaction), and an H_2 blocker (such as ranitidine).

160.

Absorption of nutrients from the small bowel is often impaired in older adults because of:

Age-related cellular mutations

Decreased muscular contractility

Narrowing and lengthening of villi

Broadening and shortening of villi

Explanation:

Absorption of nutrients from the small bowel is often impaired in older adults because of broadening and shortening of villi, which decreases the surface area available. Additionally, levels of some enzymes decrease. For example, lactase levels may fall, and this can cause increased lactose intolerance. When fecal material moves slowly through the bowels, bacterial overgrowth may occur, and this can affect the absorption of nutrients because the bacteria require nutrients and can also cause diarrhea, which interferes with absorption.

161.

A 22-year-old patient is on a strict vegan diet. The patient is most at risk for which type of blood disorder?

Vitamin B_{12} deficiency

Iron deficiency anemia

Folic acid deficiency

Autoimmune hemolytic anemia

Explanation:

A 22-year-old patient who is on a strict vegan diet is most at risk for vitamin B_{12} deficiency because vitamin B_{12} is found in animal products. Signs and symptoms include glossitis because of changes in mucosal cells, anorexia, diarrhea, and low hemoglobin with leukopenia and thrombocytopenia. The nervous system is impaired, beginning with the peripheral nerves and paresthesias and progressing to problems with balance and proprioception. Dementia may occur.

162.

If the NP needs to delegate a task to a licensed vocational or practical nurse (LVN/LPN) but is unsure how the nurse performs because the NP has not worked with this LVN/LPN before, the best initial approach is to:

Assign the task and try to observe the LVN/LPN

Ask the LVN/LPN how he or she would go about doing the task

Ask the opinion of nurses who have worked with the LVN/LPN before

Outline specific steps to carrying out the task

Explanation:

If the NP needs to delegate a task to a licensed vocational or practical nurse (LVN/LPN) but is unsure how the nurse performs because the NP has not worked with this LVN/LPN before, the best initial approach is to ask the LVN/LPN how he or she would go about doing the task. Then, the NP should share expectations and any specific instructions, including under what conditions and when the LVN/LPN needs to report to the NP and how the NP will supervise.

163.

The NP should recommend the herpes zoster (shingles) vaccine for:

All adults

Adults 45 and older

Adults 60 and older

Adults 65 and older

Explanation:

The NP should recommend the herpes zoster (shingles) vaccine (Zostavax) for adults age 60 and older. The vaccine decreases the incidence of shingles by 51% and the incidence of postherpetic neuralgia by 67%. People who have already had shingles may still benefit from the vaccination because shingles can recur. Adults born prior to 1980 are considered immune to varicella even if they don't recall having the disease and do not need the varicella vaccination, only the herpes zoster. Contraindications include allergy to gelatin, neomycin, or other components of the vaccination, pregnancy, and immunocompromised patients.

164.

The NP notes that one nursing team member often avoids taking care of older patients and sometimes makes disparaging remarks about the elderly. The most appropriate response is for the NP to:

Advise the nurse that ageism is inappropriate

Discuss attitudes toward aging with the nurse

File a complaint against the nurse

Avoid assigning the nurse to older patients

Explanation:

If the NP notes that one nursing team member often avoids taking care of older patients and sometimes makes disparaging remarks about the elderly, the most appropriate response is for the NP to discuss attitudes toward aging with the nurse. People who exhibit ageism are often concerned about their own aging and may be unaware of their bias against older adults. However, the NP should also make clear that older patients must receive the same quality of care as younger patients and that negative comments about the elderly are inappropriate.

165.

Acute kidney injury may occur with sepsis because of:

Nephrotoxins

Autoimmune response

Urinary tract obstruction

Decreased renal perfusion

Explanation:

Acute kidney injury may occur with sepsis because of decreased renal perfusion and is a common cause of acute kidney injury in patients who are critically ill, occurring in about 20% of