

# CCI CFPN® - Quiz Questions with Answers

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# 1. Pre/postoperative Patient Assessment and Diagnosis

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## 1. Pre/postoperative Patient Assessment and Diagnosis

1.

An 80 year-old patient scheduled for a total hip arthroplasty is at an increased risk for developing which of the following complications?

**Deep vein thrombosis secondary to immobility.**

Air embolism from the position on the fracture table.

Peroneal nerve damage to the operative leg.

Hypothermia related to increased subcutaneous fat deposits.

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*Providing safe, quality care for the older adult in the perioperative setting requires the nurse to have a thorough knowledge of the changes associated with aging and the risk factors for surgical complications.*

*One change associated with aging is the increased risk for the development of deep vein thrombosis (DVT). The chances of developing DVT increase with age and double each decade of life over the age of 40 years. In addition, the incidence of DVT is more than 150-fold higher among hospitalized patients (largely due to immobility while hospitalized) than those in the community.*

*Prevention of DVT in the older person begins in the preoperative phase of care. Whenever possible, the nurse should contact the patient well in advance of the planned procedure to begin education on DVT precautions (such as avoiding long air travel, walking daily, and drinking adequate fluids).*

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2.

An example of a nursing diagnosis for a patient undergoing coronary artery bypass graft surgery would be:

**Anxiety.**

Effective Coping.

Induced Hyperthermia.

Improved Tissue Perfusion.

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*Nursing diagnoses have evolved since they were first introduced in the 1950s, and involve the process of identifying and classifying data collected in the assessment in a way that provides a focus to plan nursing care. They are identified, named, and classified according to human response patterns and functional health patterns. The North American Nursing Diagnosis Association International (NANDA-I) is the authoritative organization responsible for delineating the accepted list of nursing diagnoses.*

*Each NANDA-I-approved nursing diagnosis has a set of components, as follows:*

- a definition of the diagnostic term*
- its defining characteristics (e.g., the requisite pattern of signs and symptoms or cues that make the meaning of the diagnosis clear)*
- its related or risk factors (e.g., causative or contributing factors that are useful in determining whether the diagnosis applies to a particular patient)*

*For a patient planning to undergo coronary artery bypass grafting, anxiety would be an appropriate perioperative nursing diagnosis. The other answer choices are not approved perioperative nursing diagnoses. Ineffective coping, hyperthermia, and ineffective peripheral tissue perfusion are approved nursing diagnoses for the perioperative setting.*

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**3.**

A normal serum potassium (K) level for an adult is:

**3.5 – 5.0 mEq/L.**

2.5 – 4.0 mEq/L.

3.0 – 4.5 mEq/L.

4.0 – 5.5 mEq/L

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*Normal potassium levels for adults are as follows:*

- *Serum: 3.5-5 mEq/L*
  - *Plasma: 3.5-4.5 mEq/L*
-

**4.**

A patient is brought to the ED after a motor vehicle accident. The patient's abdomen is rigid and painful, and the hematocrit (HCT) is 27%. As the perioperative nurse prepares the OR for the arrival of this patient for surgery, the primary course of action would be to:

**set up the autotransfusion (cell saving) device and notify the appropriate personnel.**

set up the invasive monitoring lines needed for patient management.

place the fluid/blood warmer in the OR and prepare for blood transfusions.

place the sequential compression machine and stockings in the OR.

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*Due to the patient's condition and major blood loss (active hemorrhaging as evidenced by the patient's very low hematocrit levels), the perioperative nurse must ensure the OR is set up for autotransfusion during surgery.*

*Autotransfusion is the reinfusion of a patient's own blood intraoperatively. It is used with increasing frequency in surgery, as predated autologous blood donation is in decreasing use. During intraoperative autotransfusion (cell salvage), blood is collected as it is lost during the surgical procedure and reinfused to the patient after it is filtered or washed. This is a lifesaving technique during emergency cases (as with major trauma patients), or in procedures with major blood loss. It can also be an option for patients who refuse blood based on religious beliefs.*

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**5.**

Most abdominal aortic aneurysms:

**have minimal symptoms.**

carry a high mortality rate when electively repaired.

occur below the aortic bifurcation.

involve weakening of the tunica adventitia

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*Abdominal aortic aneurysms (AAAs) account for most aneurysms and occur primarily between the renal arteries and the aortic bifurcation. They involve intimal aortic damage and weakening of the tunica media (elastic portion) of the arterial wall. The vessel wall in the damaged area slowly expands, and atheroma develops within the aneurysm sac.*

*Because an AAA has minimal symptoms, it is generally diagnosed by routine history and physical examinations. Diagnosis is made if the diameter of the infrarenal aorta is 3 cm or larger for men, or 2.6 cm or larger for females. With elective surgical repair of the aneurysm, mortality is low. Aortic dissection is thought to arise from an abrupt tear in the aortic intima, opening the way for blood to enter into the aortic wall. Operative mortality dramatically increases with aortic dissection and rupture, because of the abrupt and massive hemorrhagic shock that accompanies the rupture.*

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**6.**

A patient with a mild systemic disease, such as hypertension and cardiovascular disease requiring minimal restrictions on activity, would receive which American Society of Anesthesiologists (ASA) classification?

**II**

I

III

IV

*Assigning a physical status classification depends on the physiologic condition of the patient, and is independent of the surgical procedure the patient is planning to undergo. This classification system was developed by the ASA to provide standardized guidelines and evaluate the severity of systemic diseases, physiologic dysfunction, and anatomic abnormalities. It is utilized widely to estimate perioperative risk, and is as follows:*

- *P1: Normal healthy patient with no physiologic, psychological, biochemical, or organic disturbance*
  - *P2: Patient with mild systemic disease (cardiovascular disease with minimal restriction of activity; hypertension, asthma, chronic bronchitis, obesity, diabetes mellitus, or tobacco use; mild asthma or well-controlled hypertension. No significant impact on daily activity. Unlikely impact on anesthesia and/or surgery)*
  - *P3: Patient with severe systemic disease that limits activity, but is not incapacitating*
  - *P4: Patient with severe systemic disease that is a constant threat to life or requires intensive therapy*
  - *P5: Moribund patient who is not expected to survive 24 hours or without operation*
  - *P6: Patient declared brain dead whose organs are being removed for donor purposes*
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7.

When assessing a patient scheduled for an indirect inguinal hernia repair, the perioperative nurse remembers that indirect hernias

**are more common than direct hernias.**

originate above the inguinal ligament.

occur most often in males under 30 years of age.

rarely enter the scrotum.

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*Correct answer: are more common than direct hernias.*

*Indirect hernias do not originate above the inguinal ligament. Incidence of indirect hernias increases with age, and is not more likely to occur individuals under 30 years of age than those over 30 years of age.*

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**8.**

Providing explanations of monitoring and safety devices is most effective in addressing an adolescent's fear of:

**death.**

separation from parents.

loss of privacy.

altered body image.

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*Age-appropriate communication is important in implementing the pediatric nursing plan of care. Implementation begins during the perioperative nursing assessment and continues through discharge to the PACU or other area.*

*Adolescents may fear altered body image, peer rejection, disability, and loss of control or status. The fear of death is more prevalent in this age-group than any other. Because of this, adolescents may find explanations of monitoring and safety measures reassuring during their surgical experience(s).*

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9.

A 35-year-old female patient with breast cancer is scheduled for a radical mastectomy and is anxious and fearful about the surgical procedure. The preoperative nurse knows which of the following interventions would be least effective to alleviate this patient's fear and anxiety?

**Explain in detail the proposed surgical procedure**

Attentively listen

Provide reassurance

Encourage her to express her concerns

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*Correct answer: Explain in detail the proposed surgical procedure*

*Explaining every detail of the proposed surgical procedure will likely add to the patient's fear and anxiety. Rather, interventions to alleviate anxiety include factual information and clarification of misunderstandings, as well as giving the patient the opportunity to express her feelings and listening attentively, providing reassurance as necessary.*

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**10.**

The medical history of a patient scheduled for a D and C includes rheumatoid arthritis, cholecystectomy, and childhood tonsillectomy and adenoidectomy. Which of the following nursing diagnoses is it imperative for the perioperative nurse to formulate?

**Impaired physical mobility**

Sensory/perceptual alterations

Altered sexual behavior

Altered nutrition

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*Correct answer: Impaired physical mobility*

*The patient's history of rheumatoid arthritis combined with a dilation and curettage could lead to impaired physical mobility that could impair recovery.*

*Sensory/perceptual alterations and altered sexual behavior may be considerations, but are less likely to create a prolonged recovery time, as there are no comorbidities to potentiate these diagnoses. Altered nutrition is unlikely to be an issue.*

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11.

A 21-year-old patient is admitted to the preoperative holding room for an appendectomy. During the interview, the patient admits to smoking marijuana on a regular basis. The nurse's first action would be to:

**notify the anesthesiologist of the findings.**

call the surgeon to the holding room.

document the information on the patient's chart.

alert the rest of the team in the operating room.

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*Correct answer: notify the anesthesiologist of the findings.*

*Active substance use can lead to complications recovering from anesthesia and may mean that a patient is not a candidate for ambulatory surgery. The anesthesiologist will need to know about the patient's substance use due to the complications that this can cause more than the surgeon or the rest of the operating team. Documenting the finding alone is not sufficient action.*

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**12.**

Basic functions of the GI tract are ingestion, \_\_\_\_\_, mixing, digestion, propulsion, absorption, and elimination by defecation.

**secretion**

swallowing

motility

reabsorption

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*The GI tract, or alimentary canal, is a continuous, tubelike structure that spans the human torso. It includes the mouth; pharynx; esophagus; stomach; small intestine, consisting of the duodenum, jejunum, and ileum; and large intestine. The large intestine consists of the cecum, ascending colon, transverse colon, descending colon, sigmoid colon, rectum, and anus. The length of the GI tract is about 20 feet (6 meters).*

*Basic functions of the GI tract are ingestion, secretion, mixing, digestion, propulsion, absorption, and elimination by defecation.*

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**13.**

A patient is brought to the operating room with a subdural hematoma. Which of the following is the most likely cause of deterioration in the patient's condition?

**Increased intracranial pressure**

Decreased cerebrospinal fluid

Cerebral thrombosis

Neurogenic shock

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*Increasing intracranial pressure (ICP) due to hematoma formation can cause rapid deterioration in the patient's condition, and requires emergency decompression craniotomy.*

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**14.**

The Joint Commission (TJC) requires health care organizations to have a defined process for obtaining informed consent. At a minimum, this process should include the patient's being able to verbalize an understanding of the

**benefits and risks of the proposed procedure.**

guaranteed outcome of the surgical procedure.

right to choose the anesthetic agent.

surgeon's competency to perform the procedure.

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*Correct answer: benefits and risks of the proposed procedure.*

*Informed consent indicates that the patient is able to understand why they need a procedure and the risks of undergoing the procedure. The outcome of the procedure is not guaranteed. The patient does not necessarily have the right to choose the anesthetic agent. While the surgeon should have the competency needed to perform the procedure, this is not part of informed consent.*

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15.

During the preoperative interview, which of the following statements by the patient would alert the perioperative nurse to a susceptibility to malignant hyperthermia?

**"My mother died from a fever after she had surgery years ago."**

"I was very nauseated the last time I had surgery."

"I don't remember anything about my last operation."

"My uncle died from a heart attack during his chest surgery."

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*Correct answer: "My mother died from a fever after she had surgery years ago."*

*Malignant hyperthermia is a complication of anesthesia caused by altered cellular calcium transport. One of the most common symptoms of this condition is hyperthermia that occurs during or following the administration of anesthesia. This condition is often fatal and has a strong genetic component. A direct relative dying from a fever after surgery should raise the suspicion of malignant hyperthermia. While this could be describing a post-surgical infection, malignant hyperthermia cannot be ruled out based on this description.*

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**16.**

Which of the following is a priority for the perioperative nurse to collect during the assessment from a patient who is having elective surgery?

**The patient's understanding and expectations of the surgery**

The plan for the patient's anesthesia care

The psychosocial status of the patient's family

The plan for the patient's fluid and electrolyte maintenance

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*Assessing the patient's understanding of the planned surgery should be of primary importance to the perioperative nurse. Any misunderstanding or confusion about what the surgery is to entail should be documented and reported immediately to the primary surgeon.*

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17.

Which of the following might aid the perioperative nurse in identifying an increased risk of unplanned hypothermia in preoperative patients?

**A history of organ transplantation**

A high body mass index (BMI)

A history of hyperthyroidism

An immunocompromised state

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*All perioperative patients are at risk for the development of hypothermia as a result of multifactorial causes related to the perioperative environment. The perioperative nurse should be aware of additional patient factors which increase their risk of developing unplanned hypothermia, including:*

- *age*
  - *gender*
  - *low BMI*
  - *congestive heart failure*
  - *cardiac vessel disease or a history of cardiac surgery*
  - *several preexisting medical conditions, including hypothyroidism, hypoglycemia, and malnourishment among others*
  - *history of organ transplantation*
-

**18.**

Witnessing a signature to an informed consent assures that:

**the patient's signature, time, and date are valid.**

the patient understands the reason for the surgical procedure.

the surgeon has explained the risks, benefits, and alternatives to the planned procedure.

the surgical procedure listed on the consent is correct.

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*Except in emergencies, every surgical procedure must have documentation of the patient's consent in the chart prior to being performed. The practitioner performing the surgical procedure is legally responsible to inform the patient about the proposed operation or other invasive procedure and its inherent risks, benefits, alternatives, and complications before obtaining the patient's verbal and written consent. Every facility has a policy regarding how to document this "informed consent," but generally, documentation is accomplished by means of a signed consent form and/or the primary surgeon's entry into the progress notes.*

*Nurses who are witnesses to the signing of the consent form attest only to the validity of the patient's signature, time, and date, and not to the adequacy of the patient's understanding because that assurance remains the duty of the surgeon or physician performing the procedure.*

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**19.**

A 7-year-old patient had a tonsillectomy and arrived in PACU 10 minutes ago. The nurse observes the patient is snoring, respiration is 12, and pulse oximetry is 88% with oxygen at 8 L/min via face mask. The immediate nursing response should be to:

**stimulate the patient to take deep breaths.**

open the patient's airway using a chin tilt/jaw thrust technique.

insert an artificial oral/nasal airway into the patient.

increase the patient's oxygen to 10 liters per minute.

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*Many factors influence emergence from anesthesia. The objective is to move the patient from the OR bed to the PACU bed as soon as the dressing is applied. During emergence, the anesthesia provider suctions the oropharynx before extubation to decrease the risk of aspiration and laryngospasm after extubation, reverses any residual neuromuscular blockade, and allows the washout of N<sub>2</sub>O and volatile agents by giving 100% O<sub>2</sub> several minutes before extubation.*

*After extubation, the patient is taken to the PACU to fully awaken and recover. In some cases, the patient may be transferred to the PACU before extubation and the ETT removed when the patient is fully awake.*

*Untoward events that can occur with general anesthesia include hypoxia; respiratory, cardiovascular, or renal dysfunction; hypotension; hypertension; fluid or electrolyte imbalance; residual muscle paralysis; dental damage; neurological problems; hypothermia; and malignant hyperthermia (MH).*

*If the patient is groggy upon PACU arrival (as evidenced by the above vital signs), the nurse should immediately and initially stimulate the patient to take deep breaths, as this is a fairly common finding upon emergence from anesthesia. The other steps may need to be taken if the patient does not respond to verbal and tactile stimulation.*

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20.

What type of skin cancer rarely metastasizes?

**Basal.**

Squamous.

Melanoma.

Epithelial.

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*The estimated number of new skin cancer cases diagnosed in 2012 was 2 million, and the three most common skin cancers are basal cell, squamous cell, and melanoma. Basal cell cancer accounts for approximately 70% of all skin cancers and, if left untreated, will grow locally, but will rarely metastasize. Treated early, basal cell skin cancer may be cured by simple excision and closure (with pathologic diagnosis to ensure disease-free margins).*

*The second most common form of cancer is squamous cell carcinoma (SCC), and is considered more aggressive. Surgical treatment is the same as that for basal cell carcinomas. Melanoma accounts for the smallest percentage of skin cancers but is treated much more aggressively because of its high mortality rate.*

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**21.**

Information that may identify a need for the nurse to exercise problem-solving skills is first obtained during which phase of the nursing process?

**Assessment**

Nursing diagnosis

Implementation

Evaluation

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*Nursing process is the bedrock of all nursing actions. This process of critical thinking may require that the nurse utilize her problem solving skills during the first step of the nursing process, assessment of the patient.*

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**22.**

Which of the following patients is at greatest risk for developing intraoperative hypothermia?

**A 76-year old male scheduled for bilateral femoral-popliteal bypass**

An 18-month old female scheduled for bilateral tympanostomies with insertion of ear tubes

A 26-year old male scheduled for a laparoscopic inguinal herniorrhaphy

A 46-year old female scheduled for a modified radical mastectomy

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*The risk for developing hypothermia is greater for older patients and those undergoing general or major regional anesthesia for longer than 1 hour*

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**23.**

A 62-year-old patient with a history of heart disease and deep vein thrombosis is scheduled for an elective lumbar laminectomy with discectomy and hardware removal. The perioperative nurse reviewing the preoperative record would take immediate action to do which of the following?

**Apply sequential compression stockings**

Administer a prescribed sedative

Obtain a blood specimen for a stat coagulation studies

Request that the patient be typed and crossed for 2 units of blood

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*The use of mechanical means to prevent venous thromboembolism (VTE) is standard when preparing a patient for surgery. Application of intermittent pneumatic compression devices and graduated compression stockings should be completed prior to the patient receiving any regional or general anesthesia. A patient with a known history of VTE is at risk of sustaining another VTE.*

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**24.**

During the preoperative assessment, the patient tells the perioperative nurse that he believes in the benefits of herbal supplements and takes several daily including St. John's Wort, Kava, and Valerian. The patient is at an increased risk of:

**prolonged sedative effect.**

hypocalcemia.

hypokalemia.

delayed wound healing.

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*Correct answer: prolonged sedative effect.*

*Both St. John's Wort and Valerian are associated with prolonged sedative effects, leading to potential complications during recovery. These herbal supplements are not commonly associated with an increased risk of hypocalcemia, hypokalemia, or delayed wound healing.*

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25.

A patient scheduled for a bronchoscopy presents to the preoperative admissions area with a history of night sweats, weight loss, and hemoptysis. The perioperative registered nurse will need to include which of the following into the plan of care?

**Provide an N-95 respirator for all members of health care team.**

Institute contact precaution measures.

Assure positive pressure in the OR.

Schedule patient for first case of the day

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*Correct answer: Provide an N-95 respirator for all members of health care team.*

*Patients suspected of infectious TB disease should be placed in a negative airflow environment and respiratory secretion isolation. All elective surgeries postponed until treatment is started and effective. All health care workers caring for patient should wear an N-95 respirator. TB is an airborne organism and the appropriate airborne precautions must be implemented until the patient is no longer deemed infectious.*

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**26.**

What is the minimal fasting period prior to surgery for the infant who drinks breast milk?

**4 hours**

2 hours

6 hours

8 hours

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*Nothing by mouth (NPO) fasting guidelines are recommended for healthy patients undergoing elective procedures. For the infant whose primary diet is breastmilk, a 4-hour minimum fasting period is recommended prior to any elective surgical procedure to decrease the risk of aspiration once the infant has been given anesthesia.*

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27.

Which of the following statements regarding breast cancer is accurate?

**The probability of developing breast cancer increases with age.**

Random screening and mammography decreases risk.

One in twenty women in the United States may develop breast cancer.

Women with cancer in any other organ have a decreased risk for cancer of the breast.

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*Most surgical procedures involving the breast are indicated to either establish a definitive diagnosis or to treat breast cancer. Besides skin cancer, breast cancer is the most common cancer in American women, and it is estimated that one in every 8 women in the US will develop breast cancer during her lifetime. The most significant risk factors for developing breast cancer are being a woman and growing older. A woman with cancer in one breast is at increased risk for cancer in the other breast.*

*There is a 98.5% 5-year survival rate if breast cancer is detected early. Heightened public awareness, an increased number of women practicing self-examination, early detection of breast masses by mammography (based on national guidelines), and reduced use of hormone replacement therapy (HRT) has shown to slow the annual increase in breast cancer mortality.*

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**28.**

A 38-year-old patient is scheduled for a right modified radical mastectomy with immediate reconstruction utilizing a transverse rectus abdominus musculocutaneous flap. When the perioperative nurse arrives, the patient is crying, expressing fear to her husband about losing her breast and what she would look like without it.

Of the following nursing diagnoses, which should be listed as the primary diagnosis in the care plan for this patient?

**Body image disturbances related to impending surgical procedures**

Sensory/perceptual alterations related to impending surgical procedures

Sexual dysfunction related to impending surgical procedures

Knowledge deficit related to unfamiliarity with perioperative routines

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*Patients undergoing breast surgery will likely be extremely apprehensive about the possibilities of having a malignancy, losing a body part, facing a negative reaction from her spouse and family, and experiencing a negative change in self-image. Based on the nursing assessment, the perioperative nurse uses nursing diagnoses to develop a plan of care.*

*The most appropriate nursing diagnosis related to the care of this patient would be: Disturbed Body Image related to loss of body part (in impending surgical procedures).*

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**29.**

As discharge may be an anxiety-producing time for a surgical patient, which of the following strategies should a perioperative nurse use to ensure successful discharge teaching for a patient and family?

**Provide supplemental written instructions when possible**

Advise the patient to call the physician for instructions when the anxiety lessens

Delay teaching until the patient is relaxed

Give instructions to the family only, as the patient may be too anxious to receive them

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*A comprehensive discharge plan should identify and address communication barriers, incorporate the patient's current mental and physical condition, address environmental issues that can be improved to support recovery, and reduce the social support challenges.*

*Discharge teaching should be conducted at a time when the patient is at rest, not during preoperative or postoperative procedures. Patient education should consider health literacy and be individualized based on how the patient will best understand the information. Giving the patient postoperative discharge instructions in written form helps with retention, and modifications using large, easy-to-read typeface on matte-finish paper of warm tones (yellow, tan) make the instructions easier to read. Family members or significant others who are present should be included in the educational session so that they can provide reinforcement at home.*

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30.

The body's first line of defense against infection is:

**the skin.**

surgical gloves.

the bones.

prepping with povidone-iodine (Betadine) solution.

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*The human body has three lines of defense to combat infection. They are as follows:*

- *The first line of defense consists of external barriers, including the skin and mucous membranes. These are usually impervious to most pathogenic microorganisms.*
  - *The second line of defense is the inflammatory response, which prevents an invading pathogen from reproducing and possibly involving other tissues.*
  - *The third line of defense is the immune response, and is triggered after the inflammatory response. When a break in this defense mechanism occurs, the possibility for infection increases.*
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**31.**

The perioperative nurse is reviewing the preoperative record of a patient who is scheduled for a right total knee replacement under spinal anesthesia. Which of the following information on the patient's record requires further assessment by the nurse?

**Self-administration of heparin**

Allergy to nuts

A history of COPD

Verbalization of right knee pain at 5 on a scale of 1 to 10

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*Correct answer: Self-administration of heparin*

*Heparin is a anticoagulant that increases the risk of bleeding. If the patient is self-administering heparin, further assessment will be needed to determine the bleeding risk. A history of COPD would be important for general anesthesia, not spinal anesthesia. Allergy to nuts is not a concern for spinal anesthesia. Knee pain prior to a TKA is expected.*

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**32.**

During the preoperative assessment, it is noted that the patient takes acetylsalicylic acid daily. Which laboratory value should be documented?

**Bleeding time**

Clotting time

Sodium

Potassium

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*Any facility that participates in operations and other invasive procedures maintains records of each operation that must comply with state and federal regulations, as well as with accreditation requirements. Operative records include preoperative diagnosis, surgery performed, a thorough description of findings, specimens removed, postoperative diagnosis, and names of all individuals participating in the operative care of the patient.*

*The use of surgical safety checklists enhances patient safety and reduces perioperative adverse events. Part of this safety checklist includes the preoperative assessment (before the induction of anesthesia), and a list of tasks that must be completed prior to a skin incision. If it is noted in the preoperative assessment that the patient takes acetylsalicylic acid (aspirin), the nurse should ensure a bleeding time has been obtained and documented (as this medication carries the risk of prolonged bleeding times), to reduce the risk of bleeding and/or hemorrhage during surgery.*

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**33.**

Effective discharge planning begins:

**during the preoperative assessment.**

prior to transfer to the postanesthesia care unit (PACU).

on admission to the OR suite.

when the case is officially posted to the schedule.

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*A comprehensive discharge plan should identify and address communication barriers, incorporate the patient's current physical and mental condition, address environmental issues that can be improved to support recovery, and reduce social support challenges. It should also consider the patient's ability to perform ADLs, ambulate, and manage his or her preexisting medical condition after surgery.*

*Discharge planning begins during the preoperative assessment, as adequate time is necessary to ensure appropriate decisions about postdischarge care are in place, prevent complications, reduce the risk of readmission, and minimize stress for the patient and caregivers.*

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**34.**

The most reliable indicator of the existence and intensity of pain is the patient's:

**self-report.**

vital signs.

medication administration record.

history of pain medication use and abuse.

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*Pain is multidimensional and is experienced in many different, personalized ways. The patient's self-report is considered to be the most reliable indicator of pain. Self-report measurement includes numeric or verbal descriptor ratings and visual analog scales. Pain measurement tools must be appropriate for the patient's gender and age, development, physical, emotions, cognitive, and cultural status.*

*The perioperative nurse must also take into account the patient's history of pain medication use and abuse, the patient's vital signs, and the patient's medication administration record (MAR) as a part of the comprehensive assessment of pain. But, s/he must recognize that the patient's self-report of pain is ultimately the most reliable indicator.*

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**35.**

During the preoperative assessment the patient states she is not allergic to medications, but is allergic to bananas and avocados. This information might be important because

**allergies to bananas and avocados may be related to an allergy to latex.**

some anesthetics are derived from food products and should not be used in the presence of food allergies.

allergies to bananas and avocados may be related to an allergy to antibiotics.

allergies to bananas and avocados may be related to an allergy to prep solutions.

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*Correct answer: allergies to bananas and avocados may be related to an allergy to latex.*

*Latex allergies may be more likely to be present with certain food allergies, such as allergies to bananas and avocados. Banana and avocado allergies are not associated with allergies to antibiotics or prep solutions. Food allergies are unlikely to indicate problems with anesthetics.*

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**36.**

The most appropriate nursing diagnosis for an adult patient who is scheduled for a cochlear implant would be:

**sensory dysfunction.**

impaired gas exchange.

risk for falls.

impaired verbal communication.

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*A cochlear implant is indicated in a deaf patient, and is a device surgically implanted in the cochlea of the inner ear, with the receiver resting in the mastoid. As the device receives sound through the receiver, it emits electrical impulses through the transmitter into the cochlea and along the acoustic nerve. These impulses are interpreted as sound in the auditory area of the brain, which is in the temporoparietal area of the cerebral cortex.*

*Adult candidates for this procedure generally have diagnosed severe or profound hearing loss with pure-tone average of 70-dB hearing loss. They must currently be using appropriately fitting hearing aids or a trial with amplification, have aided scores on open-set sentence tests of less than 50%, and no evidence of central auditory lesions or lack of an auditory nerve.*

*The most appropriate nursing diagnosis for this patient is sensory dysfunction, as the patient receiving a cochlear implant must be taught to interpret new sounds, requiring extensive sensory and auditory training, as well as psychological counseling.*

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**37.**

A motor vehicle accident (MVA) victim being treated for cardiac tamponade is likely to exhibit which of the following signs?

**Jugular vein distention.**

Bradycardia.

Widening pulse pressure.

Hypertension.

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*In approximately 20% to 25% of trauma victims, trauma to the chest area is the primary cause of death. Blunt trauma to the chest is often associated with high-speed MVAs. Myocardial contusion generally involves the right ventricle, and can be evidenced by dysrhythmias present when the patient arrives at the hospital or shortly thereafter. Heart valves can rupture as well, depending on the timing of the contusion in relation to the phase of the cardiac cycle. If a valve has ruptured, emergent surgery to repair the ruptured valve is necessary. Heart valve rupture can occur as a late complication of myocardial contusion.*

*Pericardiocentesis is performed for signs and symptoms of pericardial tamponade, which include jugular venous distention, muffled heart sounds, and a narrowing pulse pressure. In addition, the patient is likely to be hypotensive. The patient may present to the OR for a pericardial window either emergently, or during the recovery phase.*

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**38.**

For a patient taking Hydrochlorothiazide (HCTZ) for hypertension, what is the most important lab value to assess?

**Potassium**

Chloride

Sodium

Iodine

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*Correct answer: Potassium*

*HCTZ may cause hypokalemia, as it is not a potassium-sparing diuretic. Anytime a diuretic is administered, potassium is monitored and may be replaced as needed. Sodium levels may also be impacted, but are not as physiologically impactful as potassium. Chloride and iodine are not routinely monitored during diuretic administration.*

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**39.**

The perioperative nurse is interviewing the patient preoperatively. This interview should include review of

**physical assessment, informed consent, herbal supplements, and NPO status.**

medical history, laboratory tests, informed consent, and account status.

NPO status, allergies, payment schedule, and advanced directives.

medications, insurance, allergies, and medical history.

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*Correct answer: physical assessment, informed consent, herbal supplements, and NPO status.*

*The preoperative interview should include physical assessment, informed consent, supplement and medications, and NPO status. Medical history and laboratory tests would be reviewed immediately prior to surgery. Insurance and payment related information is not typically collected by the nurse.*

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**40.**

An orthopedic procedure may be canceled if the:

**implants are not available.**

operative site was marked with indelible ink.

patient's blood pressure is 160/105 mm Hg.

patient's temperature is 99° F (37.2° C).

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*Orthopedic surgical procedures require an extensive inventory of instruments and implants and specific instruments to implant and apply hardware. Revision surgery requires that the perioperative staff be prepared with the appropriate tools and extractors needed to remove an old implant and an understanding of equipment use. Preoperative planning is essential for orthopedic surgery.*

*Implant inventories include plates and screws, intramedullary nails and rods, total joint implants, and a variety of accessory items. The surgical team must ensure these items are stocked and ready for use in a timely fashion to prepare for various surgical procedures. If an implant is not available, the procedure may have to be canceled and rescheduled for a later date.*

*The other answer choices do not warrant canceling an orthopedic procedure.*

---

**41.**

The preoperative nurse is reviewing a patient's medical record and identifies all the following relevant factors for increased risk of deep vein thrombosis (DVT), except:

**History of pregnancy**

Advanced age

History of cardiovascular disease

History of obesity

---

*Correct answer: History of pregnancy*

*Venous stasis, changes in clotting factors in the blood, and damage to vessel walls are the primary causes of DVT in the lower extremities, referred to as Virchow's triad. Contributing risk factors include increasing age (older than 50 years), previous history of DVT or PE, malignancy, smoking, estrogen or current pregnancy, vein disease, obesity, immobility, and clotting disorders.*

*A history of pregnancy without complications does not place a patient at increased risk for DVT development.*

---

**42.**

When should the preoperative nursing assessment be conducted by the perioperative nurse?

**Before the surgery**

Prior to discharge

In the surgeon's office

Before the surgical consent is signed

---

*On the day of surgery the perioperative nurse should perform an assessment and verify the information obtained during the preadmission assessment and note any subsequent changes in health status, thus forming a baseline for the patient's health status.*

---

**43.**

A 24-year-old obese patient is scheduled for a laparoscopic ventral hernia repair. Which of the following should the nurse identify as the greatest risk to the patient during the immediate postoperative period?

**Pulmonary aspiration**

Wound dehiscence

Infection

Poorly controlled pain

---

*Aspiration is the passage of regurgitated material into the lungs, occurring most often during tracheal intubation or extubation. The PACU nurse protects the airway of unconscious or semiconscious patients to prevent aspiration of gastric contents. Prevention of aspiration postoperatively includes responding quickly to reports of nausea and vomiting, avoiding conversations that could elicit nausea and vomiting, and preventing rapid movement and head elevation of the patient.*

*Obesity places patients at higher risk of postoperative aspiration, and these patients can be placed on their sides in the recovery position while in the PACU.*

---

**44.**

A patient is undergoing a surgical procedure using local anesthesia. The perioperative nurse should consider an allergic drug reaction if the patient's:

**pulse increases from 76 to 144.**

temperature decreases from 37°C to 36.5°C.

blood pressure increases from 100/60 to 120/72.

pulse oximetry reading decreases from 99% to 97%.

*Local anesthesia is usually used for minor, short-term surgical, diagnostic, or therapeutic procedures, and because the patient does not lose consciousness, it is the preferred method of anesthesia when the patient's cooperation is needed for the procedure.*

*The perioperative nurse must be clinically competent to use monitoring equipment and to interpret data. S/he must also be familiar with the medications administered during the procedure, usual dosages, limits on rate of injection and maximum dosage, duration of action, expected patient changes and reactions, and what to do in the case of an adverse reaction. The nurse monitors the patient for side effects such as CNS disturbances, cardiovascular problems, hypersensitivity to medication, and toxic reactions resulting from high levels of local anesthetic.*

*Signs and symptoms of allergic reaction include urticaria, tachycardia, laryngeal edema (resulting in breathing difficulties), nausea, vomiting, and elevated temperature. In some cases, anaphylactoid symptoms (including severe hypotension), can occur. If any significant changes occur in the patient's status, the perioperative nurse should notify the physician immediately.*

*A blood pressure of 120/72, a slight temperature decrease from 37C to 36.5C, and a pulse oximetry reading decrease from 99% to 97% are all still well within normal limits and not a cause for concern.*

---

**45.**

A perioperative nurse is reviewing the record of a patient who is scheduled for a laparoscopic cholecystectomy. The nurse should give priority to reviewing the patient's:

**consent form.**

lab results.

level of comfort.

physician notes.

---

*Correct response: consent form.*

*Prior to other interventions, the patient's consent form should be verified as signed and present. Only after it is verified that the patient has consented to the procedure should further assessments and interventions be performed.*

---

**46.**

During a preoperative assessment, a patient reports taking a vitamin E supplement daily. The patient is at risk for which of the following intraoperative complications?

**Bleeding**

Prolonged sedative effect

Hypoglycemia

Hypertension

---

*Correct answer: Bleeding*

*Vitamin E can affect blood clotting and increase bleeding times. This supplement should be avoided due to the risk of bleeding that can develop. Vitamin E is not associated with prolonged sedative effect, hypoglycemia, or hypertension.*

---

47.

A small sacral skin ulcer is noted on a 70-year-old patient admitted to the surgical suite for bowel surgery. For this patient, the laboratory value that would be of primary importance to check is

**serum protein.**

pH.

serum alkaline phosphatase.

serum phosphorus.

---

*Correct answer: serum protein.*

*Skin ulcerations, especially pressure ulcers, can be an indicator of low serum protein levels. Protein plays an important role in wound healing, making it important to ensure that the patient's serum protein is within normal ranges as they prepare for surgery. Low serum protein may also be more likely depending on what is causing the patient's underlying need to bowel surgery.*

---

48.

The nurse is planning care for a patient who is scheduled for a bowel resection with possible creation of a colostomy. The patient expresses concern about being able to wear a swimming suit if a colostomy is created. Which of the following is the priority nursing diagnosis at this time?

**Body image disturbance**

Anxiety

Altered skin integrity

Risk for infection

---

*Correct answer: Body image disturbance*

*While body image disturbance, anxiety, altered skin integrity, and risk for infection are all potential diagnoses for this patient, the patient's concern for her appearance makes body image disturbance the greatest immediate concern that should be prioritized.*

---

**49.**

A patient having bariatric surgery has a higher risk of complications if the patient is/has:

**of male gender.**

of female gender.

an open procedure.

a laparoscopic procedure.

---

*All patients who undergo bariatric surgery need special consideration as they will generally have associated serious comorbidities that place them at increased risk during the procedure itself. Patients who weigh over 350 lbs will require a special OR bed to accommodate them during the surgical procedure, as well as extra-large blood pressure cuffs and extra-long trocars. Padded safety restraints, pressure reduction devices, and properly fitting IPCDs (intermittent pneumatic compression devices) are required for positioning, and anesthesia assistance may be required during intubation and airway management.*

*The most significant risk factors for serious complications include history of smoking, pulmonary disease, coronary artery disease (CAD), mobility limitations, history of venous thromboembolism, type of procedure, and male gender.*

*There does not seem to be a difference noted in risk for complications between open and laparoscopic approaches to bariatric surgery.*

---

**50.**

The goal of discharge planning is to:

**provide continuity of care.**

decrease patients' length of stay.

prevent postoperative complications.

refer patients to community health care services.

---

*In its simplest form, the nursing process defined by the ANA consists of the following six steps:*

- 1. assessment,*
- 2. nursing diagnosis,*
- 3. outcome identification,*
- 4. planning,*
- 5. implementation, and*
- 6. evaluation.*

*The process is dynamic and continual. Also, in all areas of nursing practice, certain responsibilities are inherent in the nursing process, including providing culturally and ethnically sensitive and age-appropriate care, maintaining a safe environment, educating patients and their families, ensuring continuity and coordination of care through discharge planning and referrals, and communicating information effectively.*

*Thus, the primary goal of discharge planning is to provide and ensure continuity and coordination of care. Referrals may include, but are not limited to, community health care services.*

---

51.

During the preoperative assessment, a perioperative nurse notes that the patient appears to be extremely anxious about the surgery. In this situation, the most appropriate initial nursing action would be to

**evaluate the intensity, appropriateness, and duration of the patient's anxiety.**

tell the patient that they need not discuss the surgery if it makes the patient uncomfortable.

document that the patient appears anxious about the surgery.

tell the patient that there is nothing to worry about.

---

*Correct answer: evaluate the intensity, appropriateness, and duration of the patient's anxiety.*

*The first intervention related to anxiety should be assessment of the anxiety. Avoiding discussing surgery with the patient is not correct. Documenting the anxiety will be necessary, but is not the most important initial intervention. Reassuring the patient prior to assessing the cause and severity of their anxiety is not correct.*

---

**52.**

Which of the following would be considered most important in helping to alleviate acute pain for a patient who had surgery?

**Communicating effectively with the patient**

Waiting until the patient asks for pain medication

Providing alternative pain management therapies

Administering the highest dose of the pain medication ordered for the patient

---

*Pain is a multidimensional, subjective experience that the patient may or may not verbalize. Patients experience its aspects in different, personalized ways. A comprehensive pain assessment considers the physical, sensory, behavioral, sociocultural, cognitive, affective, and spiritual dimensions of pain. The most reliable indicator of the existence and intensity of pain is the patient's self-report.*

*Effective communication with the patient is key; patients may have difficulty communicating their pain, which requires particular attention by staff caring for the patient. All patients should be assessed for pain severity using a verbal descriptor rating scale, numeric rating scale, or a visual analog scale, according to their particular needs.*

---

**53.**

The operative consent indicates that the patient is to undergo a left pneumonectomy. However, the patient states, "I thought it was my right lung they were going to take out." The history has been dictated but is not on the chart. The perioperative nurse should first

**notify the surgeon.**

obtain patient x-ray reports.

notify the charge nurse.

talk with the patient's closest family member.

---

*Correct answer: notify the surgeon.*

*If there is any potential question about the surgical site, the surgeon should be notified immediately to ensure that the site is identified correctly. The surgeon may ask the nurse to obtain patient x-ray reports, but this should not be the nurse's first action. Notifying the charge nurse or talking with the patient's family member is not the first intervention the nurse should take.*

---

**54.**

A 53-year-old patient with degenerative osteoarthritis of the knees is scheduled to undergo a left total knee arthroplasty. During the preoperative assessment, the patient expresses reluctance to "waste time exercising." The perioperative nurse's most appropriate response would be to:

**emphasize the importance of the rehabilitation program to provide optimal outcomes.**

inform the surgeon that the patient has expressed an unwillingness to comply with the recommended rehabilitation program.

inform the primary nurse of the patient's unwillingness to comply with the recommended rehabilitation program.

request assistance from the physical therapist responsible for planning and coordinating the patient's rehabilitation program.

---

*A successful postoperative course for a patient undergoing total knee arthroplasty is dependent upon several factors including the patient's compliance with the postoperative rehabilitation program. Other factors include the actual selection of the patient, selection of the knee implant design component specific for the patient, and the technique used by the surgeon during surgery.*

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## 2. Individualized Plan of Care Development and Expected Outcome Identification

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### 2. Individualized Plan of Care Development and Expected Outcome Identification

55.

A patient is undergoing a repair of a strabismus and is to receive an anticholinergic medication. Which of the following is an expected outcome of this medication?

**Decrease nausea and vomiting**

Stimulate gastric emptying

Potentiate the effects of narcotics

Decrease intraocular pressure

---

*The use of anticholinergic medications by anesthesia providers for surgical premedication is common. Atropine and glycopyrrolate (Robinol) are two commonly administered anticholinergic medications that are given to dry up oral secretions and prevent nausea and vomiting by decreasing vagal tone.*

---

**56.**

A patient is scheduled for an epidural steroid block for intractable lumbar pain. The pain, which began suddenly 6 months ago, is bilateral and is rated 7/10; relief from narcotic pain medication taken at regular intervals has been minimal. The plan of care will include:

**helping the patient to cope with pain, explaining the procedure, and assisting with anesthesia or analgesia intraoperatively.**

developing a trusting nurse-patient relationship, encouraging early postoperative activity, and facilitating communication between patient and physician.

encouraging pain relief postoperatively, helping the patient to cope with pain, and relating patient progress to the family.

avoiding judgmental statements, reassuring the patient that the procedure will not cause pain, and documenting pain medications.

---

*Chronic lumbar pain typically results from degenerative or arthritic changes of the lumbar disks. Pain tends to increase gradually. Epidural steroid injection, placement of electrodes or spinal stimulators, or the use of spinal traction or lumbar braces may all be used to treat lumbar pain.*

---

**57.**

A patient with ocular trauma is scheduled for vitrectomy. During the preoperative assessment, the patient becomes progressively agitated, expressing a terror of blindness and death. The perioperative nurse would initially

**speak calmly and provide emotional support.**

assess the patient's sensorium thoroughly.

collaborate with the surgeon.

send a blood sample for drug screening.

---

*Correct answer: speak calmly and provide emotional support.*

*Presurgical anxiety is not unexpected. Speaking calmly and providing emotional support is a good initial intervention. Assessing the patient's sensorium thoroughly or performing a drug screen is not necessary, as their behavior is most likely due to anxiety. Collaboration with the surgeon may be necessary if the patient's anxiety continues to intensify, but is not a good initial intervention.*

---

**58.**

The perioperative nurse can expect to implement which of the following nursing interventions first for a trauma patient whose hematocrit is 22%?

**Obtain a blood specimen for a type and cross match.**

Ensure a glucometer is in the OR.

Request 2 units of O-positive blood from the blood bank.

Set up the rapid infuser with sterile water for injection.

---

*Laboratory values aid the trauma team in evaluating a trauma patient's status. Appropriate laboratory tests for a trauma patient include a minimum of a complete blood count (CBC), hemoglobin and hematocrit (H&H) value, blood alcohol level (BAL), and a blood type and screen.*

*A hematocrit of 22% is very low, and likely indicates anemia and/or hemorrhage. A crossmatch is needed with the above laboratory tests to safely give the patient blood, which is indicated in this scenario. Most trauma centers have several units of type O-negative blood (universal donor) available in the event that a blood transfusion is required before a type and crossmatch (T&C) can be performed.*

---

**59.**

Patients selected to have moderate sedation must meet criteria established by:

**an interdisciplinary group of caregivers.**

the surgeon.

the anesthesiologist.

the primary care physician.

---

*Selection of patients for moderate sedation/analgesia depends on established criteria developed by an interdisciplinary team.*

*Patients undergo a comprehensive thorough assessment physiologically and psychologically before the procedure by a team of caregivers. This assessment includes a review of physical examination findings; current medications; existing allergies; current medical problems; history of smoking, alcohol intake, or substance abuse; current chief complaint; baseline vital signs, height, and weight; age; emotional state; any communication deficits; and patient perceptions of moderate sedation/analgesia.*

---

**60.**

A patient is scheduled for a breast biopsy with frozen section under local anesthesia. Appropriate intraoperative care would include:

**keeping room traffic and noise levels to a minimum.**

playing lively music and discouraging the patient from talking.

encouraging team members to be cheerful and upbeat.

allowing the patient time alone by staying busy with circulating duties.

---

*The surgical suite should be designed to minimize the spread of infectious organisms and to facilitate movement of patients and personnel within that framework. Ideally, the suite is divided into three areas: the unrestricted area, the semirestricted area, and the restricted area. Personnel entering semirestricted or restricted areas should do so through prescribed routes which contain vestibular areas (serving as transition zones between the outside and inside of the suite).*

*Air is a potential source of pathogenic microorganisms, and airborne contamination increases with movement of the surgical team. Movement should be kept to a minimum during the operative procedure.*

*In addition, noise can cause distraction, increasing the potential for miscommunication and errors within the perioperative team. While the patient is in the OR, especially during induction and emergence, every effort should be made to maintain a calm, quiet environment. Hearing multiple voices can create patient anxiety and confusion during an already very scary time.*

---

## 61.

Risk factors for postoperative ileus include intra-abdominal infection, intra-abdominal inflammation, retroperitoneal hemorrhage and:

**manipulation of the bowel during surgery**

lack of bowel sounds.

intestinal gases.

lack of intestinal gas

*Patients undergoing surgical intervention for GI disorders vary greatly in length of time and complexity of recovery. Most patients experience a temporary decrease in bowel activity for about 3 days after GI surgery, called "postoperative ileus." Motility of the small intestine usually returns to normal within a few hours after GI surgery. Stomach motility returns to normal within 24 to 48 hours, and the large intestine returns to normal within 48 to 72 hours. Prolonged postoperative ileus should be considered when it lasts beyond the expected 3 days. Signs and symptoms of prolonged ileus are absence of bowel sounds, abdominal distention, diffuse abdominal pain, nausea, and vomiting.*

*Causes of prolonged ileus vary, and can arise from neurogenic, inflammatory, hormonal, pharmacologic, or mechanical effects of surgery, as well as:*

- *overmanipulation of the intestines during surgery*
- *intra-abdominal infection or inflammation*
- *retroperitoneal hemorrhage*

*Identifying early bowel sounds through abdominal auscultation may signal the return of small intestine motility. However, only the passage of flatus or stool indicates full return of bowel function and resolution of ileus.*

---

**62.**

In relation to transcultural needs of the patient, it is important to include \_\_\_\_\_ needs in the nursing assessment.

**spiritual**

medical

activities of daily living

pharmacological

---

*Correct answer: spiritual*

*Transcultural needs include spiritual, ethnic, and family patterns. Standard assessment of patient needs involve physical, physiological, and any other health status considerations.*

---

**63.**

While assessing a patient in the preoperative area who is scheduled for a splenectomy, the perioperative nurse notes that the patient has been on warfarin sodium (Coumadin). The nurse should give priority to reviewing which of the following laboratory test results?

**Prothrombin time**

Platelet count

Creatinine clearance

White blood cell count

---

*Correct answer: Prothrombin time*

*Warfarin alters prothrombin time, and prothrombin time should be measured to assess if the effects of warfarin are still present, as this can significantly increase the risk of bleeding. Platelet count, creatinine clearance, and white blood cell count are unlikely to be affected by prothrombin time.*

---

**64.**

To meet the needs of a patient with hypovolemia, the perioperative nurse should anticipate treatment that involves which of the following?

**Fluid volume replacement, positioning techniques, temperature maintenance, oxygen therapy, and administration of various drugs**

Monitoring of the partial pressure of oxygen to ensure circulation of oxygen to the tissues

Administration of various drugs to maintain blood pressure, correct acidosis, or protect the kidneys from failure

Administration of whole blood and plasma expanders, or replacement with other IV fluids

---

*Hypovolemia reduces cardiac output and may be caused by hemorrhage, dehydration (inadequate fluid replacement), or increased positive end-expiratory pressure (PEEP). Decreased vascular resistance, which causes relative hypovolemia (interference with venous return to the heart), can be related to medications, general and regional anesthesia, or anaphylaxis.*

*Fluid and/or blood replacement is used to treat hypovolemia. Vasodilation can be treated with fluids, vasopressors, elevating the patient's legs, temperature regulation, and oxygen therapy.*

---

**65.**

Hypothermia is a condition of lowered body temperature that is possibly caused by all of the following except

**warmed infusion or irrigating solutions.**

evaporative/conductive heat loss from exposed areas.

use of general or regional anesthesia.

surgical exposure of the abdominal or thoracic cavities.

---

*Correct answer: warmed infusion or irrigating solutions.*

*Hypothermia is a low body temperature, less than 96.8 degrees Fahrenheit or 36 degrees Celsius. This can be caused by cool or room temperature infusion or irrigating solutions, not warm. Evaporative/conductive heat loss from exposed areas, use of general or regional anesthesia, and surgical exposure of the abdominal or thoracic cavities are all potential causes of hypothermia.*

---

**66.**

A geriatric patient is scheduled for a lengthy surgical procedure that will take approximately 8 hours to complete. Which of the following would indicate that the nursing goal of preserving skin integrity intraoperatively, has been met for this patient?

**No adverse effects to the integumentary system are observed.**

The dressing remains dry and intact.

No adverse flora are revealed in skin cultures taken.

The skin remains stained with the disinfectant agent.

---

*Assessment for positioning needs should be made before the patient transfers to the OR bed. The perioperative nursing assessment includes a patient interview, physical examination, and review of medical records. Key points of assessment that are related to surgical positioning include length of procedure, age, height and weight, skin condition, nutritional status, preexisting conditions, and physical mobility/limitations. It should also be determined if there are any specific areas of discomfort that a particular position may cause, and alleviating interventions to implement to reduce or minimize discomfort.*

*Geriatric patients are at high risk for skin problems caused by positioning, as thin skin layers and increased arteriosclerosis make them more prone to skin breakdown because of pressure. Thus, a reasonable outcome for a nursing diagnosis of Risk for Impaired Skin Integrity for a geriatric patient undergoing a lengthy surgical procedure would be to maintain skin and tissue integrity consistent with preoperative status, with no adverse effects observed.*

---

**67.**

The perioperative nurse is caring for a 2-year-old patient. A positive outcome for reduced separation anxiety is enhanced by:

**providing the patient with a favorite toy for comfort.**

playing loud music in the OR suite.

having the family and healthcare team discuss the patient's plan of care away from the patient.

talking to the patient about the surgery in medical terms.

---

*A child's comprehension of and responses to the environment are based on developmental age. Nursing care should be tailored to the developmental age of the child to optimize the child's ability to understand the situation, to minimize the child's and family's stress and anxiety, and to facilitate the development of a trusting and supportive medical relationship. The types of fears are also related to the child's level of psychological development.*

*A toddler fears separation. Thus, an appropriate nursing intervention would be to allow a personal item into the OR for comfort/security. In turn, this should reduce separation anxiety and create a more positive experience for the child.*

*The other answer choices are not acceptable for a 2-year-old patient.*

---

**68.**

In the preadmission testing interview, the patient should be instructed to suspend which of the following medications prior to surgery?

**Aspirin**

Hydrochlorothiazide

Lanoxin

Phenytoin

---

*During the preadmission testing interview, the perioperative assesses for use of medications (prescription and over-the-counter [OTC]) and herbal products. Aspirin, in addition to other prescription and OTC medications and some herbal products, has anticoagulant properties which may adversely affect the patient both during and after surgery.*

---

**69.**

Which of the following patient outcomes would be appropriate in the nursing plan of care for a patient undergoing the first of two cataract extractions with lens replacement?

**The patient demonstrates understanding of the surgical procedure and the postoperative plan of care, and is able to avoid injury caused by visual deficits.**

The patient demonstrates knowledge of postoperative complications, the intraoperative care plan, and the need to delay postoperative activity.

The comfort of the patient is maintained, body temperature remains normothermic, and the patient ambulates within 8 hours postoperatively.

The patient understands self-care needs, provides own self-care within one week of surgery, and expresses minimal need for pain control.

---

*Since this patient will be undergoing the first cataract extraction and has not yet experienced this sort of surgical procedure before, an appropriate nursing diagnosis related to this scenario would be: deficient knowledge or readiness for enhanced knowledge related to diagnosis, surgical intervention, and home care management.*

*Based on this nursing diagnosis, the most appropriate outcome would then be: the patient, family, or significant others will verbalize knowledge of the diagnosis, planned surgical intervention, medication management, and requirements for home care maintenance before discharge. The patient would be able to verbalize an understanding of avoiding injury caused by the visual defects, and surgical management of them.*

---

**70.**

Which of the following is a potential intraoperative complication for a patient with hyperthyroidism?

**Thyroid storm.**

Hypotensive crisis.

Hypokalemia.

Hypercalcemia.

---

*A rapidly progressive and potentially fatal intraoperative complication for patients with hyperthyroidism is thyroid storm, otherwise known as thyrotoxic crisis. This complication develops suddenly and severely and, if left untreated, death rates are 20% to 30%.*

*Thyrotoxic crisis can be precipitated by a stressful event, such as surgery. The perioperative staff must be able to recognize and differentiate between uncomplicated thyrotoxicosis and thyroid storm, and furthermore be prepared to act quickly. Thyroid storm presents abruptly with high-fever, mental deterioration, and decompensation of one or more organ systems as a result of severe hypermetabolism. Causes of this often rapid rise in thyroid hormone levels include thyroid or parathyroid surgery, radioiodine therapy, withdrawal of antithyroid drug therapy, vigorous thyroid palpation, and thyroid hormone medication, among others.*

---

71.

A perioperative nurse is developing a care plan for a 16-month-old toddler who will be having surgery for an intestinal obstruction. Which of the following preparations is most important to include in this patient's care plan?

**Increase the room temperature before the child's surgery.**

Carry the child to the operating room to decrease the child's anxiety

Allow the child to bring a favorite toy to the operating room.

Allow the parents to join the child in the holding area.

---

*When preparing for pediatric surgery, the perioperative nurse must know that infants and young children are most at risk for hypothermia secondary to their increased body surface area-to-weight ratio, and thin fat layer. Once the pediatric patient gets cold, oxygen consumption increases, and resultant hypoxia ensues. In addition, the child is likely to experience respiratory depression, acidosis, hypoglycemia, and pulmonary vasoconstriction. Hypothermia alters drug metabolism, prolongs the action of neuromuscular blockers, and delays emergence from anesthesia.*

*It is imperative for the perioperative nurse to closely monitor the child's temperature throughout the intraoperative experience, because the child must remain normothermic for optimal outcomes. The easiest way to do this is by exposing only the area on which surgery is being performed. Other thermoregulatory interventions include altering the room temperature before the child enters the room, using a water-filled temperature-regulating blanket under the patient, or using a forced-air warming blanket over nonsurgical areas of the child. In addition, an overhead heater can be used during the induction and patient preparation period, and warmed solutions should be available for use for procedures with large body areas of exposure.*

*The other answer choices should be taken into consideration when preparing a pediatric patient for surgery, but the priority intervention is temperature regulation.*

---

**72.**

A patient is scheduled to undergo a surgical procedure under moderate sedation. The perioperative nurse should inform the patient that

**a responsible adult escort is necessary for discharge.**

a 2-hour recovery period is necessary prior to discharge.

activities of daily living can be resumed immediately after surgery.

verbal postoperative instructions will be given in the PACU.

---

*Correct answer: a responsible adult escort is necessary for discharge.*

*Moderate sedation does not require a 2-hour recovery period prior to discharge, but does require a responsible adult escort. The ability to resume activities of daily living is related to the procedure, not to the sedation used. Written instructions should be given, as some anterograde amnesia may be present.*

---

**73.**

When preparing a preschool child for surgery, the perioperative nurse should allow the child to:

**participate in any way possible.**

play with the instruments.

ambulate with his or her parents.

act out anxiety-producing situations.

---

*A child's comprehension of and responses to the environment are based on developmental age. Perioperative care should be tailored to the developmental age of the child to optimize the child's ability to understand the situation, to minimize the child's and family's stress and anxiety, and to facilitate the development of a trusting and supportive medical relationship.*

*For preschool children (ages 3-4), the nurse should allow him or her to handle (but not play with) unfamiliar objects to decrease stress (e.g., mask, pulse oximeter probe), and give the child a sense of control. Participation in care is key at this age. The nurse should also allow a personal item into OR for comfort/security.*

---

**74.**

A preoperative nursing diagnosis of "altered emotional state" may be derived from

**an interview with the patient and a comparison of the patient's behavior to accepted norms.**

a spouse's statement that the patient is "upset."

the unit nurse's statement that the patient is demanding.

a review of the chart for medical diagnosis, diagnostic work-up, and history and physical.

---

*Correct answer: an interview with the patient and a comparison of the patient's behavior to accepted norms.*

*A preoperative nursing diagnosis of "altered emotional state" requires assessment of the patient's emotional wellbeing by the nurse themselves and a comparison of their emotional state to accepted norms.*

---

**75.**

A patient who is intoxicated arrives in the OR for emergency repair of facial fractures. The perioperative nurse would initially prepare for possible:

**aspiration.**

liver failure.

restraint of the patient.

cardiac arrest.

---

*For emergent procedures, the perioperative nurse knows the trauma patient is at a higher risk of aspiration, and must prepare accordingly. Particularly in the case of intoxication, in which the patient has a greater likelihood of vomiting.*

*A rapid-sequence induction or an "awake" fiberoptic intubation may be planned. In these instances, the perioperative nurse must be ready to assist by applying cricoid pressure. This is done by exerting downward pressure on the cricoid cartilage with the thumb and index finger of one hand (referred to as Sellick maneuver). This action occludes the esophagus, which lies immediately posterior to the trachea, enhancing the view required for intubation. The pressure should not be released until proper placement of the ETT has been confirmed and the cuff inflated.*

---

**76.**

The perioperative nurse is preparing a patient who is to receive local anesthesia. Which of the following is a priority for the nurse to explain to the patient?

**Sequence of events before, during, and after the procedure**

The type of needle that the surgeon will use to inject the local anesthetic

The amount of local anesthetic that the surgeon is likely to administer

The type of solution that will be used to disinfect the surgical site

---

*Provision of patient education continues to be one of nursing's primary responsibilities. Patients who are preparing to undergo surgical procedures which utilize local anesthesia should be educated as to the sequence of perioperative events before, during, and after the procedure. In addition, these patients should be educated on how to complete a pain assessment/communicate their pain and how to request analgesia (pharmacologic or otherwise), and reportable post-procedure symptoms.*

---

**77.**

The patient's diet is reintroduced following gastrointestinal (GI) surgery only after:

**GI motility returns.**

it is 2 days post-op

the patient feels like eating.

the surgeon writes the order.

---

*The postoperative patient who undergoes GI surgery may have decreased peristalsis for at least 24 hours, which could persist for several days. Increased fluid intake and early ambulation promote return of peristalsis. Bowel sounds are auscultated with a stethoscope to ensure that peristalsis has returned, and the abdomen assessed for distention. The patient should only begin eating solid foods after peristalsis returns.*

---

**78.**

When caring for a patient undergoing a below the knee (BK) amputation, the perioperative nurse recognizes that the procedure:

**is done to promote maximum independence.**

will relieve phantom limb pain.

involves an incision at the junction between the middle and lower thirds of the lower leg.

has fewer risks than reconstruction.

---

*Amputations involving the lower extremity are performed to eliminate ischemic, gangrenous, necrotic, or infected tissue; relieve pain; and promote maximum independence. Amputations may be necessary because of trauma or malignancy or when the lower limb cannot be salvaged by arterial reconstruction.*

*Immediately following amputation, patients may experience phantom limb pain, which is characterized by burning, throbbing, shooting, or stabbing pain in the area where the limb has been amputated. Though it may recur, it becomes less frequent in the months following surgery.*

*Operative risks for amputation are higher than those for reconstruction, possibly because of more extensive vascular disease. BK amputations are best done at the junction of the upper and middle thirds of the lower leg. This allows for an immediate postoperative prosthesis, aids in better healing, and may reduce phantom limb pain.*

---

**79.**

The Glasgow coma scale (GCS) cannot be used on patients:

**suspected of drug and alcohol intoxication.**

under 2 years or over 85 years of age.

who are hypotensive and hypothermic.

who are unresponsive and tachycardic.

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*The GCS is commonly used to assess patients with brain injury. Three indicators of cerebral function—eye opening, verbal communication, and motor response to verbal and noxious stimuli—are assessed, and the appropriate number of points for each is assigned and totaled. The best possible score is 15, and the worst possible score is 3.*

*Patients under the influence of drugs and/or alcohol have altered brain functioning, but not brain injury. Therefore, the GCS cannot be used on these patients. It can be used on patients under two and over 85 years of age, patients who are hypotensive and hypothermic, and patients who are unresponsive and tachycardic.*

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**80.**

A medication given preoperatively that does not decrease the risk of aspiration is:

**midazolam (Versed).**

metoclopramide (Reglan).

ondansetron (Zofran).

ranitidine (Zantac).

---

*The primary purpose of premedication before anesthesia is to sedate the patient and reduce anxiety. Medications that may be given preoperatively include sedatives and hypnotics, anxiolytics, amnestics, tranquilizers, narcotics or other analgesics, antiemetics, and anticholinergics. A single medication may possess the properties of several medication classes.*

*To decrease the risk of aspiration, metoclopramide (Reglan) may be given to empty the stomach and to reduce nausea and vomiting. In addition, an antacid or an H<sub>2</sub>-receptor–blocking medication, such as cimetidine (Tagamet), ranitidine (Zantac), or famotidine (Pepcid), may be included to decrease gastric acid production or the acidity of the gastric contents, or both. Chemoprophylaxis, with medications such as these, is part of safe airway management. Ondansetron (Zofran) is effective at blocking receptors that can cause nausea and vomiting, thus decreasing the risk of aspiration from vomiting; patients at risk for postoperative nausea and vomiting (PONV) receive either one or a combination of agents that block one or more of these receptor sites.*

*Midazolam (Versed) is administered frequently to relieve apprehension and to provide amnesia, not to decrease the risk of aspiration.*

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**81.**

A patient who is undergoing nasal reconstruction with local anesthesia has a history of low back pain. Appropriate care for this patient should include

**placing a pillow under the knees.**

placing a pillow under the feet.

elevating the foot of the bed.

lowering the head of the bed.

---

*Correct answer: placing a pillow under the knees.*

*Placing a pillow under the knees reduces stress on the low back and enhances patient comfort. Placing a pillow under the feet, elevating the foot of the bed, or lowering the head of the bed will not improve low back comfort.*

---

**82.**

A 72-year-old patient is scheduled for a hip pinning using the fracture table. After formulating the nursing diagnosis, "High risk for ineffective thermoregulation," the perioperative nurse will plan to maintain body temperature by all the following methods, except:

**adjusting the OR suite humidity to 30%.**

placing heat-retaining covers over as much body surface as possible.

observing for shivering

preparing for warming of irrigation fluids and blood products.

---

*Ineffective thermoregulation related to surgical procedures can be caused by any of the following: anesthetic agents, length of surgery, age of patient, OR environment, irrigation, type of surgery, or genetic predisposition to malignant hyperthermia (MH).*

*Interventions to maintain a normal body temperature throughout surgery include the following:*

- *Measure body temperature on admission; document temperature and route of measurement.*
- *Use same route of measurement for each temperature documented.*
- *Assess peripheral circulation.*
- *Monitor vital signs and oxygen saturation.*
- *Observe for shivering.*
- *Initiate measures to warm patient if hypothermic: place warmed blankets on patient's body and head; use forced-air warming device to rewarm patient; use warmed irrigation fluids and blood products*
- *Initiate appropriate measures for malignant hyperthermia, if indicated*
- *Maintain ongoing temperature monitoring until discharge.*

*Adjusting OR suite humidity to 30% will not assist in maintaining effective thermoregulation in the surgical patient.*

---

**83.**

A 78-year-old, 190-lb patient is undergoing total knee replacement. The perioperative nurse's plan of care during surgery should include

**informing the surgeon of the tourniquet times.**

turning the tourniquet off when the tourniquet time reaches one hour.

turning the tourniquet pressure up if there is breakthrough bleeding.

informing the anesthesia provider of the tourniquet times on a regular basis.

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*Correct answer: informing the surgeon of the tourniquet times.*

*The nurse's responsibility is to inform the surgeon of the tourniquet times at regular intervals to avoid limb ischemia, not to make the determination about when the tourniquet should be turned off or have its pressure increased. The nurse should inform the surgeon, not the anesthesia provider, of the tourniquet times as they do not relate to the patient's anesthetic care.*

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**84.**

A patient with a mild systemic disease, such as hypertension and cardiovascular disease requiring minimal restrictions on activity, would receive which American Society of Anesthesiologists (ASA) classification?

II

I

III

IV

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*Correct answer: II*

*An American Society of Anesthesiologists (ASA) classification of P2 or "II", indicates that the patient has a mild systemic disease that does not limit activity. A classification of P3 would indicate that activity is limited by activity and a classification of P1 indicates a healthy patient without systemic disease.*

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**85.**

The common factor for groups at high risk for sensitivity to latex is that they all:

**have frequent exposure to latex.**

have chronic respiratory problems.

are over the age of 30.

are sensitive to other skin irritants.

---

*Latex allergy and sensitivity have become more common among healthcare personnel due to their repeated exposure to natural rubber latex products. Perioperative personnel are at greater risk of frequent exposure to latex than those who work in other areas of the healthcare industry due to many commonly used items in the operating room (OR) containing natural rubber latex: gloves, vial stoppers, tubing, catheters of all kinds, and anesthesia breathing circuits, among others.*

---

**86.**

Which of the following strategies would be most appropriate to include in the plan of care of an adolescent prior to surgery, who is fearful of the surgical procedure?

**Providing the adolescent with appropriate privacy measures**

Allowing a security object for comfort

Using concrete explanations and visual aids to explain the procedure

Allowing the adolescent to participate in their hair removal

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*A child's comprehension of and responses to the environment are based on developmental age. Nursing care should be individualized to the developmental age of the child to optimize the child's ability to understand the situation, to minimize the child's and family's stress and anxiety, and to facilitate the development of a trusting and supportive medical relationship. The types of fears are also related to the child's level of psychological development. Predictable stages mean predictable behaviors.*

*The adolescent patient is likely to be experiencing pubertal changes, and has a fear of altered body image. Appropriate nursing interventions should be tailored around providing as much privacy as possible, particularly when disrobing is necessary.*

---

**87.**

When finding a hematocrit lab value of 25% for a female preoperative patient, the nurse should

**report this finding to the anesthesia provider.**

immediately cancel the procedure.

order a new hematocrit to be taken.

recognize the finding as within normal limits.

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*A hematocrit of 25% indicates anemia. This finding should be reported to a provider, such as the anesthesia provider or the surgeon. The providers will determine if the surgery must be canceled. Ordering a new hematocrit is not a correct response.*

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**88.**

In evaluating the care plan for a patient who had a breast biopsy in the ambulatory surgery unit, the perioperative nurse would compare the

**patient's postoperative emotional and neuromuscular responses to the patient's preoperative status.**

drains and dressings used and the documentation of their use in surgery.

data in the patient record to the changes in the physical appearance after surgery.

positioning techniques used in surgery and the documentation of their use.

---

*Correct answer: patient's postoperative emotional and neuromuscular responses to the patient's preoperative status.*

*When evaluating a patient's plan of care, the perioperative nurse should compare the patient's postoperative status to their preoperative status. The other comparisons listed may be worth considering, however, they are not going to enable the nurse to evaluate the patient's plan of care.*

---

**89.**

What should the parents of a 12 month old be told regarding NPO status prior to surgery?

**Give breast milk up to 4 hours prior to surgery**

Give formula up to 2 hours prior to surgery.

Allow clear liquids up to 4 hours prior to surgery.

Have no food or drink for 8 hours prior to surgery.

---

*Correct answer: Give breast milk up to 4 hours prior to surgery*

*"Infants may be given regular formula or a varied diet up to 6 hours before anesthesia and clear liquids, usually dextrose in water, up to 2 hours before the surgical procedure. A satisfactory state of hydration is thus maintained, and milk curds are absent from the stomach. Infants may be breastfed up to 4 hours before the surgical procedure. Breast milk has less or no curd and empties faster from the stomach than does formula. Infants should not miss more than one or two feedings" (p. 128).*

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**90.**

A 72-year-old patient admitted to the ambulatory surgery department for unilateral cataract extraction has a history of mild hypertension and no known allergies. A retrobulbar block will be used for anesthesia. In positioning the patient on the OR bed, the perioperative nurse should

**position the arms comfortably, support mobility impairments, and apply a safety strap.**

position the arms crossed over the abdomen, apply a safety strap, and provide a warm blanket.

position the arms crossed over the chest, insert a nasal cannula, and apply a safety strap.

tuck the arms at the patient's side, apply a safety strap, and insert a nasal cannula.

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*Correct answer: position the arms comfortably, support mobility impairments, and apply a safety strap.*

*The arms do not need to be crossed for this surgery and should be positioned, however, is comfortable for the patient. A safety strap should be used and mobility impairments should be supported. Insertion of a nasal cannula is not necessary.*

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**91.**

Parents tell the perioperative nurse that they feel their baby might not live through heart surgery. One parent states: "He's so little . . . I wish we could have him baptized." The most appropriate response by the nurse would be

**"Would you like me to call the hospital chaplain to discuss this with you?"**

"Could you call your pastor and ask him to baptize the baby?"

"I'll have the baby's nurse arrange for baptism."

"Would you like the doctor to discuss this with you?"

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*Correct answer: "Would you like me to call the hospital chaplain to discuss this with you?"*

*The nurse can and should ensure the patient and their family's spiritual needs are addressed. This is best done by having the hospital's chaplain meet with the patient and ensure that their needs are met.*

---

**92.**

A trauma patient is undergoing a below-knee (BK) amputation of the left lower extremity. Measures that the perioperative nurse should take include:

**labeling the specimen correctly, noting any specific patient requests, and facilitating its transport to pathology.**

wrapping the specimen in plastic and facilitating its transport to pathology.

wrapping the specimen in plastic and disposing of it according to hospital policies and protocols.

labeling the specimen correctly, calling the medical examiner, and notifying pathology.

---

*Amputations involving the lower extremity are performed to eliminate ischemic, gangrenous, necrotic, or infected tissue; relieve pain; and promote maximum independence. Amputations may be necessary because of trauma or malignancy or when the lower limb cannot be salvaged by arterial reconstruction.*

*Perioperative nursing measures for BK amputations should include verifying the correct limb for the procedure and correctly labeling the specimen, noting specific patient requests, and facilitating the amputated limb's transfer to pathology. The perioperative nurse must be sure that the patient does not witness the wrapping or transport of the amputated limb.*

---

**93.**

A patient admitted for a bilateral blepharoplasty has a history of low back pain. Intraoperative nursing interventions include administering oxygen via nasal cannula and monitoring vital signs every five minutes. This patient is at greatest risk for which of the following complications?

**an ignition incident during the procedure.**

a positioning injury.

a postoperative wound infection.

an allergic reaction to the prepping agent.

---

*Surgical fires are one of the top 10 technology hazards identified by the ECRI Institute (Emergency Care Research). Fires and explosions in all settings require three components:*

- 1. Ignition source*
- 2. Fuel, and*
- 3. Oxygen*

*Enriched O<sub>2</sub> and N<sub>2</sub>O atmospheres can vastly increase flammability of drapes, plastics, and hair. Based on the type of surgery this patient will undergo, and the need for continuous oxygen throughout the procedure, the patient is at greatest risk of an ignition incident. Nurses in perioperative settings can decrease risks of burns from fires by considering these "fire triangle" requirements during procedures and working with the perioperative team to reduce each to no more than necessary.*

*Be aware of possible O<sub>2</sub> enrichment under drapes. Do not apply drapes until all flammable preps have fully dried and remove spilled or pooled prep agent(s). Fiberoptic light sources can start fires; complete all cable connections before activating the source, and place the source in standby mode when disconnecting cables. Moisten sponges to make them ignition resistant and include fire risk and prevention status in briefing/time-out.*

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**94.**

A patient scheduled for a hemorrhoidectomy, which the surgeon prefers to perform with the patient in lithotomy position, states that severe arthritis limits her ability to bend her knees. The perioperative nurse should anticipate changing the planned surgical position from lithotomy to:

**Kraske position.**

reverse Trendelenburg position.

modified recumbent position.

Fowler's position.

---

*The jackknife (or Kraske) position is a modification of the prone position often used for hemorrhoidectomy or pilonidal sinus procedures. The patient's hips are placed on a bolster or pillow over the break in the lumbar section of the OR bed, and the bed is flexed at a 90-degree angle, raising the hips and lowering the head and trunk.*

*For a hemorrhoidectomy, the buttocks may be separated with strips of 3-inch tape secured firmly at the level of the anus a few inches from the midline on either side, and the strips are released at the end of the procedure to facilitate approximation of the wound edges.*

*Due to circulatory changes caused by this positioning, graduated compression stockings/intermittent pneumatic compression devices (IPCDs) should be utilized to assist in venous return and decrease the risk of venous thrombosis.*

---

**95.**

A perioperative nurse is to circulate during a closed intramedullary nailing procedure of a patient with a midshaft, right femoral fracture. Preparations for this case would include:

**notifying radiology of the need for intermittent fluoroscopy.**

positioning a Wilson convex frame on the surgical bed.

making sure that a pneumatic tourniquet is available.

confirming that femoral intramedullary trials are a part of the instrumentation process.

---

*Fractures involving the femoral shaft are very common in today's orthopedic OR and can be surgically treated with several available techniques. Intramedullary (IM) fixation devices have become the preferred method of treatment. IM nails and rods increase the load sharing of the bone, making the implant less likely to fracture. Closed reduction and intramedullary nailing with or without locking screws have become the method against which other methods are measured.*

*The perioperative nurse would prepare for this case by notifying radiology of the need for intermittent fluoroscopy, because this procedure requires the use of fluoroscopy. General or epidural anesthetics are used. The patient is placed on the OR fracture bed in the supine position, traction applied, and the fracture manually reduced and confirmed with fluoroscopy. A Russell-Taylor rod is used with or without locking screws for the operative procedure.*

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96.

A patient with type 1 insulin-dependent diabetes is scheduled for an open left colectomy. What should be done to minimize potential risks?

**Test the capillary blood preoperatively for fasting serum glucose and throughout the surgery**

Schedule the patient later in the day to allow the bowel prep to thoroughly cleanse the bowel

Start a 24-gauge butterfly IV in the antecubital vein to provide adequate IV access

Ask the surgeon to increase the preoperative insulin dose since the patient has been NPO

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*Correct answer: Test the capillary blood preoperatively for fasting serum glucose and throughout the surgery*

*To minimize the risks of hypoglycemia in a patient with type 1 insulin-dependent diabetes during surgery, blood sugar levels should be tested before and during surgery. A 24-gauge butterfly IV is not adequate IV access. The preoperative insulin dose should be decreased, not increased. Cleanse the bowel is not relevant for this patient.*

---

**97.**

The best option for a patient needing long term dialysis is the use of a/an:

**arteriovenous shunt.**

synthetic vascular graft.

human umbilical vein graft.

bovine carotid artery.

---

*Arteriovenous fistulas are direct connections between an artery and a vein. These are the standard means vascular access for long-term renal dialysis patients. The dilated vein can then be used for direct cannulation with large-bore needles for hemodialysis. External shunts carry a high risk of thrombosis and infection, and are not preferred over AV fistulas.*

*The best access is achieved using the patient's own vessels, creating a subcutaneous connection between the artery and vein, referred to as an arteriovenous shunt, or bridge fistula.*

*Other choices include using a bovine carotid artery, a human umbilical vein graft, or a synthetic vascular graft, but these are not preferred over an arteriovenous shunt.*

---

**98.**

The most appropriate time for a patient with insulin-dependent diabetes mellitus (IDDM) to be scheduled for an elective surgical procedure is

**first thing in the morning.**

four hours after the patient's last meal.

after the patient's insulin injection.

anytime since the patient can eat a meal and then receive insulin.

---

*Correct answer: first thing in the morning.*

*By scheduling the surgery of a patient with insulin-dependent diabetes mellitus (IDDM) first thing in the morning, blood glucose complications associated with prolonged fasting can be avoided, as the patient's normal eating routine can have minimal disruptions.*

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**99.**

A patient who is scheduled for a postpartum tubal ligation is moved from the transportation vehicle to the operating room bed. The patient states, "What if I decide I want another baby some day?" The perioperative nurse's immediate action should be to

**notify the surgeon and other team members about the patient's statement.**

verify that the sterilization consents are signed.

inform the OR charge nurse that the case is being cancelled.

reinforce teaching about microscopic reconstruction of the fallopian tube.

---

*Correct answer: notify the surgeon and other team members about the patient's statement.*

*Postpartum tubal ligation is a permanent method of sterilization. The surgeon and other team members should be notified about the patient's statement to promote further evaluation of if the surgery should be conducted. Even if sterilization consents are signed, the patient still has the right to change their mind. Further assessment should be performed before the surgery is canceled. It is better to ensure the patient wants the procedure done than it is to discuss reversal options.*

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