**Special Topic/Introductory Chapter: Aseptic Technique, Sterilization, OR Attire, and National Time Out**

Multiple Choice

1. All of the following are true about masks except:

A. They should be changed after each case.

B. They protect the wearer from spraying of blood or body fluids.

C. They have to be worn in unrestricted areas of the OR.

D. They must be worn so that they cover the mouth and the nose.

ANS: C

2. Which of the following statements is false regarding OR attire:

A. Caps or hats must cover all hair (including facial hair).

B. Cloth caps or hats can be worn for three consecutive days without laundering.

C. Tunic style scrub tops should be tucked into your scrub pants.

D. Regular eyeglasses alone do not meet the standards for protective eyewear.

ANS: A

3. Unsterile personnel should stand a minimum of \_\_\_\_\_\_\_\_ inches from the sterile field.

A. 8

B. 12

C. 20

D. 24

ANS: B

4. Principles of aseptic technique include all of the following except:

A. Keep talking at the field to a minimum.

B. Only sterile (scrubbed) personnel handle sterile items.

C. Create the sterile field as close to the time of surgery as possible.

D. It is acceptable for circulators to reach over the sterile field to pour liquids into a cup.

ANS: D

5. All of the following statements are true about sterile drapes except:

A. They should be made of a low-linting material.

B. Once in place, they should not be moved.

C. Handling should be kept to a minimum.

D. The part of the drape that falls below the level of the table top is sterile.

ANS: D

6. Surgical conscience is the:

A. legal motivation to practice proper aseptic technique

B. ethical motivation to practice proper aseptic technique

C. institutional policies governing the practice of proper aseptic technique

D. financial motivation to practice proper aseptic technique

ANS: B

7. *Asepsis* means:

A. absence of all viruses

B. absence of all bacteria

C. absence of all flagella

D. absence of all microbes

ANS: D

8. Which of the following is considered sterile on a sterile gown?

A. the stockinette cuffs

B. the back

C. the front between the waist and mid-chest

D. the entire front of the gown

ANS: C

9. If scrubbed personnel need to change positions during surgery, they need to move:

A. back to side

B. side to side

C. front to side

D. back to back

ANS: D

10. A \_\_\_\_\_\_-inch perimeter around an open peel pack is NOT considered sterile.

A. ½

B. 1

C. 1 ½

D. 2

ANS: B

11. Immediate-use sterilizers use \_\_\_\_\_\_\_\_\_\_\_ to sterilize instruments.

A. steam

B. cold chemicals

C. radiation

D. gas

ANS: A

12. You may be asked to wear a “sterile space suit” for which type of surgery?

A. exploratory laparotomy

B. shoulder arthroscopy

C. total joint replacement

D. endoscopic AAA repair

ANS: C

13. Which of the following is an example of an acceptable patient identifier?

A. Mr. Jones

B. Room 213

C. Robert R. Jones

D. May 20

ANS: C

14. Who can ask for a “time out” to be done prior to a skin incision being made?

A. the circulator only

B. the surgeon only

C. the surgical technologist only

D. any team member

ANS: D

15. Gas plasma sterilization uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gas plasma technology.

A. hydrogen peroxide

B. ethylene oxide

C. hydrogen sulfide

D. ethylene sulfide

ANS: A

Short Answer

16. You go to pick up the patient from the unit to bring her to the OR. When the patient is asked to state her full name and date of birth she replies, “Mary Smith, May 2, 1950.” You notice her hospital ID bracelet says “Mary Smith” but the date of birth (DOB) on the bracelet is “05/2/47.” What do you do or say?

ANS: You need to ask her to state her DOB again while you recheck her bracelet. If she still gives the same answer, you need to excuse yourself from the patient and notify the patient’s nurse as the DOB on the bracelet may be wrong or you may have the wrong patient—there could be two Mary Smiths scheduled for surgery that day. Do not take the patient to the OR until this has been cleared up and you are sure that you have the correct patient.

17. You and your preceptor are the only ones in the room setting up for a total knee arthroplasty. You open a tray of instruments and when your preceptor lifts the tray out of the pan, you notice there is no filter in the bottom of the pan where there should be one. What do you do? What needs to happen to that tray of instruments?

ANS: You immediately let your preceptor know that there is no filter in the pan. The instrument tray cannot be considered sterile and therefore cannot be placed on the sterile field. The tray must be taken out of the room and a new one obtained.

18. Why are the stockinette cuffs of the sterile gown not considered sterile?

ANS: Stockinette is not impervious and can wick sweat or other moisture to the cuff surface, thus contaminating anything it touches.

19. The surgeon reaches up to place a sterile light handle into the handle socket on the light over the table. As he or she does this, you notice that his or her glove brushes the metal of the light. You are the only one who notices this. What do you do and why?

ANS: You need to speak up in a respectful and tactful manner. “Dr. Jones, I am going to give you a fresh right glove as I noticed yours just brushed the metal on the light. I have the glove right here for you.” Maintenance of strict aseptic technique is the responsibility of everyone on the team; not saying something because it is a surgeon is not an option.

20. Current recommendations state that jewelry should not be worn in the OR or be completely confined within the scrub attire. Why?

ANS: Jewelry is considered a potential source of microbes.

21. Why should unessential, excessive talking during surgery be discouraged?

ANS: It increases the amount of airborne microbes around the sterile field.

22. You have finished your first case of the day and are about to go to break. What is the proper technique for removing your mask?

ANS: Remove your mask, handling it by the strings, not the face shield. Dispose of the mask in the trash and wash your hands.

23. You are setting up to first scrub an appendectomy. You notice that several instruments are wet and ask the circulator to recheck the pan that they came in. He or she reports that there is a pool of water in the pan. You had already placed the tray of instruments on the back table. You state that the table is contaminated and you need to reset up the table. The circulator is angry and states, “We do not have time for that. This doctor is running behind and he will get upset if we take time to reset up this table. It will be fine.” What do you do and why?

ANS: You are the patient’s advocate and therefore need to speak up. You need to remind the circulator that instruments and supplies from a table that is possibly contaminated is a potential danger to the patient and therefore you cannot use them in good conscience. You then need to help the staff tear down that table and reset it up as quickly and efficiently as possible, without compromising aseptic technique.

24. The circulator is about to go and get the patient for a bowel resection that you are scrubbing. He or she tells you “We will not be doing a Time Out before we start this case. Dr. Miscue doesn’t think they are necessary.” What is your response and why?

ANS: You need to speak up and state that Time Out is a national standard that needs to be followed prior to the start of every case. Once the patient is asleep, any team member (including you) can ask that a time out be done. If the surgeon and/or circulator refuse, he or she should be reported to the OR charge nurse. This is a patient safety issue and you are your patient’s advocate. Failure to speak up can also mean you are liable, along with the rest of the team, if wrong site or wrong patient surgery is performed and Time Out was not done.

25. What are two of the most common preventable mistakes that National Time Out was instituted to help prevent?

ANS: surgery on the wrong patient, surgery on the wrong site, and the wrong type of surgery being performed

Completion

26. Talking at the sterile field should be kept to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: minimum

27. Fluids should only be distributed into a sterile container that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the edge of the field.

ANS: close

28. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is any blood, tissue, or body fluid could be present on an instrument.

ANS: Bioburden

29. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the most common and economical method of sterilization.

ANS: Steam

30. Sterile attire is worn by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ personnel during the procedure.

ANS: scrubbed

31. A cap or hat worn in the restricted or semirestricted areas of the OR and must cover all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ANS: hair

32. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the foundation of all that goes on in the OR.

ANS: Aseptic technique

33. The skin can never be rendered sterile; therefore, aseptic technique dealing with skin (e.g., scrubbing or prepping) is aimed at reducing microbes to an absolute \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: minimum

34. ANY break in sterile technique, no matter how minor it may seem, puts the patient at increased risk of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: infection

35. The draped patient is the center of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

ANS: sterile field

True or False

36. Surgical conscience is the legal motivation to practice proper aseptic technique.

ANS: False

Rationale: Surgical conscience is the ethical motivation to practice proper aseptic technique.

37. There is no such thing as “slightly contaminated” or “almost sterile.” Sterility of an item is an absolute.

ANS: True

38. While you are waiting for the case to begin, it is acceptable to fold your arms across your chest and place your hands in your axillary area.

ANS: False

Rationale: Scrubbed personnel should NOT place their hands in their axillary (armpit) area. Even though scrubbed personnel are wearing sterile gowns, strike through contamination could occur from perspiration.

39. Lead aprons should be folded and stored in piles on the shelves.

ANS: False

Rationale: Lead aprons should be hung up on appropriate hangers when not in use; they should not be folded or heaped in piles.

40. Lead aprons should be x-rayed at least monthly to check for breaks in the integrity of the lead.

ANS: False

Rationale: Lead aprons should be x-rayed at least yearly to check for breaks in the integrity of the lead.

41. Masks are worn to protect the operative area from the airborne contamination that everyone generates when they breathe, talk, cough, or sneeze.

ANS: True

42. The most common form of cold chemical sterilization used in the OR is peracetic acid.

ANS: True

43. Prior to the distribution of any fluid onto the sterile field, the type and strength of the solution and the expiration date must be verified by only the person pouring the solution.

ANS: False

Rationale: Prior to the distribution of any fluid onto the sterile field, the type and strength of the solution and the expiration date MUST be verified by BOTH the person pouring the solution and the scrub person.

44. The Mayo stand cover is the first thing opened when you are preparing a room for surgery.

ANS: False

Rationale: The large pack is the first thing opened when you are preparing a room for surgery.

45. When retrieving a sterile item from a package, the scrub person should reach straight into the package and pull the item straight upward out of the package, making sure not to touch the item on the edge of the wrapper.

ANS: True

Rationale: A 1-inch edge around the inside perimeter of the package is considered unsterile. If the item touches it, the item is considered contaminated.

46. All sharps must be discarded into a puncture-proof sharps bucket in the OR at the end of the case.

ANS: True

47. Materials used for drapes and barriers should be strong, moisture resistant, and low linting.

ANS: True

48. The patient’s room number is an acceptable patient identifier.

ANS: False

Rationale: Patients can be moved to a different room during their stay for a number of reasons; therefore, room numbers should never be relied upon to identify the patient.

49. The two most commonly used identifiers are the patient’s full name (NOT just first or last) and date of birth.

ANS: True

50. The farther sterile personnel move away from the sterile field, the greater the chance of contamination.

ANS: True