

Chapter One: Common Equipment and Supplies

Multiple Choice

1. A Mayfield attachment is most likely used for which type of surgery?

- A. total knee
- B. craniotomy
- C. total hip
- D. endoscopic AAA repair

ANS: B

2. The PACS system is used to archive which type of studies?

- A. radiologic
- B. laboratory values
- C. EEG results
- D. ECG tracings

ANS: A

3. If a tourniquet needs to stay inflated longer than the recommended time during the surgical procedure, it should be deflated for _____ minutes and then re-inflated.

- A. 5
- B. 20
- C. 25
- D. 10

ANS: D

4. During which of the following surgeries might a cell saver be used?

- A. shoulder arthroscopy
- B. bowel resection
- C. splenectomy for a ruptured spleen
- D. strangulated hernia repair

ANS: C

5. When placing a safety strap on a patient, it should be placed approximately _____ inches above the knees.

- A. 2
- B. 6
- C. 1
- D. 5

ANS: A

6. The maximum continuous time that a tourniquet should be left inflated on a leg is _____ minutes.

- A. 30
- B. 60
- C. 90
- D. 120

ANS: D

7. Which of the following would most likely be used to position a patient who is undergoing surgery on the lower back?

- A. Jackson table
- B. candy cane stirrups
- C. fracture table
- D. knee crutch stirrups

ANS: A

8. A horseshoe or Shea may be used to position the patient's _____.

- A. head
- B. arm
- C. foot
- D. shoulders

ANS: A

9. Arms should NEVER be extended more than _____ degrees on an arm board.
- A. 45
 - B. 65
 - C. 90
 - D. 120

ANS: C

10. Hyperextension of the arm can cause damage to the:
- A. peroneal nerve
 - B. popliteal nerve
 - C. brachial plexus
 - D. chordae tendineae

ANS: C

11. All of the following are types of stirrups except:
- A. candy cane
 - B. boot
 - C. knee release
 - D. knee crutch

ANS: C

12. _____ is a gas that can be used to power equipment such as saws or drills.
- A. Oxygen
 - B. Carbon dioxide
 - C. Nitrogen
 - D. Argon

ANS: C

13. Which of the following types of electrosurgery unit does not require the use of a grounding pad?
- A. monopolar
 - B. argon beam
 - C. bipolar
 - D. electrosurgical pencil

ANS: C

14. Fire safety rules during the use of electrosurgery include all of the following except:

- A. Allow all prep solutions to dry completely.
- B. Water or saline must be available on the surgical field.
- C. When not in use, the handpiece should be placed in a holder.
- D. Saline bottles may be safely stored on top of the machine.

ANS: D

15. In reference to electrosurgery units, ABC stands for:

- A. aluminum beam coagulation
- B. argon beam coagulation
- C. argon beam cautery
- D. aluminum beam cautery

ANS: B

16. Which of the following staff members should not apply the pneumatic tourniquet?

- A. surgeon
- B. physician assistant
- C. registered nurse
- D. surgical technologist

ANS: D

17. Ultrasonic cleaners use _____ to remove debris from instruments.

- A. cavitation
- B. steam
- C. ethylene oxide
- D. Cidex

ANS: A

18. _____ is an anesthetic gas.

- A. Oxygen
- B. Nitrogen
- C. Nitrous oxide
- D. Argon

ANS: C

19. An Optigard protector is used when the patient is prone to protect the _____.

- A. fingers
- B. hands
- C. toes
- D. eyes

ANS: D

20. A Doppler is used to assess _____ flow.

- A. urine
- B. coronary artery
- C. blood
- D. brain wave

ANS: C

Multiple Choice With Image

<insert figure {1-15}>

21. This image depicts which type of stirrup?

- A. knee crutch
- B. boot
- C. candy cane
- D. knee gap

ANS: B

<insert image {1-16}>

22. In which type of surgery would this frame most likely be used?

- A. cervical spine
- B. lumbar spine
- C. GYN
- D. hemorrhoids

ANS: B

<insert image {1- 43}>

23. This cord is used with what type of cautery?

- A. tripolar
- B. monopolar
- C. laser
- D. bipolar

ANS: D

<insert image {1-51}>

24. In which type of surgery would you most likely see this used?

- A. shoulder arthroscopy
- B. total knee replacement
- C. total abdominal hysterectomy
- D. knee arthroscopy

ANS: B

<insert image {1-39}>

25. Another name for this device is:

- A. active electrode
- B. inactive electrode
- C. bipolar electrode
- D. leg electrode

ANS: B

Short Answer

26. Removing the patient from stirrups requires two people to lower the legs slowly at the same time. What are the two main reasons why?

ANS: To prevent stress on the patient's lower back and if the legs are lowered too quickly, hypotension could occur.

27. What are the two main precautions regarding the perineal post on the orthopedic table?

ANS: The post should be well padded and the patient's perineal area should not rest directly against the post.

28. The oxygen regulator is missing from the wall and you are unable to find one. Another staff member hands you the yellow one marked "medical air" and says, "Just use this, it will be fine." Why is this not acceptable practice?

ANS: Regulators are gas specific and NOT interchangeable.

29. What are two important things to do prior to applying a tourniquet cuff?

ANS: Check the skin for breaks or lesions and pad the skin circumferentially with Webril and stockinette.

30. What is the main reason SCDs are ordered for a patient?

ANS: They help prevent venous stasis and decrease the chance of thrombus formation.

Completion

31. Another name for the back table is the _____ table.

ANS: instrument

32. Another name for the ring stand is a _____ stand.

ANS: basin

33. Do not place a grounding pad over a _____ prominence.

ANS: bony

34. _____ is used to insufflate the abdomen during laparoscopic surgery.

ANS: Carbon dioxide

35. A tourniquet on an upper extremity can remain inflated for up to _____ minutes.

ANS: 60 (sixty)

36. The nozzle of the smoke evacuation system must be within _____ inches of the surgical site to be effective.

ANS: 2 (two)

37. Part of the body of the operating room table, a _____ is used to elevate the flank area for better exposure during renal procedures.

ANS: kidney rest

38. Another name for candy cane stirrups is _____ stirrups.

ANS: sling

39. When using an orthopedic table, traction to the affected leg should be directed or applied by the _____.

ANS: surgeon

40. A green gas cylinder most likely contains _____.

ANS: oxygen

41. Tourniquets should be applied only by _____ personnel.

ANS: licensed

42. _____ is the reinfusion of the patient's own blood or blood products.

ANS: Autotransfusion

43. Chest rolls are used when placing the patient in a _____ position.

ANS: prone

44. _____ help avoid pressure on the axillary nerves and blood vessels during lateral positioning.

ANS: Axillary rolls

45. A _____ assesses blood flow through a blood vessel before, during, and after surgery.

ANS: Doppler

True or False

46. When placing the patient in stirrups, both legs must be lifted slowly at the same time by one person.

ANS: False

Rationale: When placing the patient in stirrups, both legs must be lifted slowly at the same time by two people.

47. An Andrews frame may be used to position a patient for surgery on the lumbar spine.

ANS: True

48. Extra-large Mayo stands are used most commonly for neurosurgical and orthopedic cases.

ANS: True

49. A good area to place the grounding pad is over the elbow.

ANS: False

Rationale: Grounding pads should not be placed over a bony prominence.

50. Bipolar cauterization requires the use of a grounding pad on the patient.

ANS: False

Rationale: The current passes from one tine of the forceps to the other and never passes through the patient.

51. Argon beam coagulation uses a combination of argon gas and monopolar electrosurgery to coagulate tissue.

ANS: True

52. When using monopolar cautery, make sure all jewelry is removed from the patient prior to surgery.

ANS: True

53. Allow all prep solutions to dry completely before using the electrosurgical unit.

ANS: True

54. If a patient receives a burn and the ESU is suspected to have caused it, throw away all disposable parts.

ANS: False

Rationale: Save ALL disposable parts of the ESU used on that patient, including the grounding pad, electrosurgical pencil, and tips. Put these supplies in a bag and send them with the machine to biomedical engineering to be checked.

55. Nitrogen is most likely stored in a blue cylinder.

ANS: False

Rationale: Nitrogen is most likely stored in a black cylinder.

56. When dealing with medical gases, do not rely solely on the cylinder color; read the label on the cylinder carefully.

ANS: True

57. Store medical gas cylinders securely in an upright position.

ANS: True

58. The maximum continuous time a tourniquet may remain inflated on a lower extremity is 180 minutes.

ANS: False

Rationale: The tourniquet may remain inflated 60 to 120 minutes.

59. Autotransfusion may be used if the patient has a known infection.

ANS: False

Rationale: In most cases, a known infection is a contraindication for the use of autotransfusion.

60. A cell saver is used when minimal blood loss is expected.

ANS: False

Rationale: The cell saver is capable of processing large quantities of blood and irrigation fluid and is used when a large blood loss is possible or expected.