UNIT 8  ADVANCED TECHNIQUES AND PROCEDURES

CHAPTER 31
ASSISTING WITH OFFICE/AMBULATORY SURGERY

Overview
To assist with minor surgery in the ambulatory care setting, medical assistants need to be able to understand and apply sterile technique. To assist the provider effectively, medical assistants need to be aware of the steps involved in commonly performed minor surgical procedures and must recognize the function of equipment and supplies necessary for each. Therapeutic communication skills are also essential in allaying patients’ apprehensions and promoting their understanding of procedures performed, as well as any postoperative care.

Lesson Plan

<table>
<thead>
<tr>
<th>I. LEARNING OUTCOMES</th>
<th>ABHES</th>
<th>CAAHEP</th>
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<tbody>
<tr>
<td>A. Define, spell, and pronounce the key terms as presented in the glossary.</td>
<td>MA.A.1.9.c(4)</td>
<td>III.C.8</td>
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<tr>
<td>B. Define surgical asepsis and differentiate between surgical asepsis and medical asepsis.</td>
<td>MA.A.1.9.o(4)</td>
<td>III.C.6</td>
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<tr>
<td>C. List eight basic rules to follow to protect sterile areas.</td>
<td>MA.A.1.9.o(4)</td>
<td>III.C.6</td>
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<td>D. State four methods of sterilization.</td>
<td>MA.A.9.h</td>
<td>III.C.6</td>
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<td>E. List supplies and equipment necessary to achieve surgical asepsis when using an autoclave.</td>
<td>MA.A.1.9.h</td>
<td>III.C.6; III.P.5</td>
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<td>F. Explain competent wrapping and operation of the autoclave.</td>
<td>MA.A.1.9.h</td>
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<td>G. State storage measures and expiration periods for autoclaved materials.</td>
<td>MA.A.1.9.n</td>
<td>I.P.10</td>
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<td>H. Explain the sizing standards of suture material and the criteria used to select the most appropriate type and size.</td>
<td>MA.A.1.9.n</td>
<td>I.P.10</td>
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<td>I. Given a variety of surgical instruments, be able to identify each and describe its intended use.</td>
<td>MA.A.1.9.n</td>
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<td>J. Demonstrate the ability to select the most appropriate type of dressings for a given situation.</td>
<td>MA.A.1.9.n</td>
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<td>K. State advantages and disadvantages of Betadine®, Hibiclens®, isopropyl alcohol, and hydrogen peroxide when each is used as a skin antiseptic.</td>
<td>MA.A.1.9.L, r</td>
<td>I.C.12; IV.P.5, 6</td>
</tr>
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<td>L. Define anesthesia, and explain the advantages and disadvantages of epinephrine as an additive to injectable anesthetics.</td>
<td>MA.A.1.9.r</td>
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<td>M. List five preoperative concerns to be addressed in patient preparation and education.</td>
<td>MA.A.1.9.r</td>
<td>IV.P.5</td>
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<td>N. List five postoperative concerns to be addressed with the patient and the caregiver.</td>
<td>MA.A.1.9.b</td>
<td>III.P.3</td>
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<td>O. Demonstrate applying sterile gloves.</td>
<td>MA.A.1.9.k</td>
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<td>P. Demonstrate setting up a surgical tray, including laying the field, applying supplies and instruments, pouring a sterile solution, using transfer forceps, and covering the sterile tray.</td>
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<td>Q. Explain what is meant by alternative surgical methods.</td>
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<td>R. Analyze the professionalism questions and apply them to this chapter’s content.</td>
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II. PROFESSIONALISM QUESTIONS
   A. Communication
      1. Did you introduce yourself? Did you identify the patient through name and birth date or other
         identifying feature?
      2. Did you listen to and acknowledge the patient?
      3. Did you speak at the patient’s level of understanding?
      4. Did you provide appropriate responses/feedback?
      5. Did you allay patients’ fears regarding the procedure being performed and help them feel safe
         and comfortable?
      6. Did you respond honestly and diplomatically to the patient’s concerns?
      7. Did you demonstrate empathy in communicating with patients, family, and staff?
      8. Does your knowledge allow you to speak easily with all members of the health care team?
      9. Did you maintain eye contact with the patient during communication?
     10. Did you accurately and concisely update the provider on any aspect of the patient’s care?
     11. Did you include the patient’s support system as indicated?
   B. Presentation
      1. Did you do something to bond with the patient?
      2. Did you attend to any special needs of the patient? Did you first ask if assistance was needed,
         rather than taking charge?
      3. Were you courteous, patient, and respectful to the patient?
      4. Did you display a calm, professional, and caring manner?
   C. Competency
      1. Did you pay attention to detail?
      2. Did you ask questions if you were out of your comfort zone or did not have the experience to carry
         out tasks?
      3. Were you knowledgeable and accountable?
   D. Initiative
      1. Did you show initiative?
      2. Were you flexible and dependable?
      3. Did you direct the patient to other resources when necessary or helpful, with the approval of the
         provider?
      4. Did you assist coworkers when appropriate?
   E. Integrity
      1. Did you work within your scope of practice?
      2. Did you protect personal boundaries?
      3. Did you immediately report any error you had made?

III. REFERENCES
   A. Lindh, Wilburta Q., Pooler, Marilyn S., Tamargo, Carol D., Dahl, Barbara M., & Morris, Julie A.,
      Delmar’s Comprehensive Medical Assisting: Administrative and Clinical Competencies, 5e
   B. See text Chapter 31, References/Bibliography
   C. Any other teacher-preferred reference material

IV. VISUAL AIDS
   A. Computer access to identified Internet resources
   B. Any other teacher-preferred visual aids (PowerPoint, etc.)

V. EQUIPMENT AND MATERIAL
   A. Computer, TV monitor, and Internet access
   B. See IV: Visual Aids

VI. SAFETY
   A. Basic classroom procedures
   B. Follow Standard Precautions with sharps, gloves, and surgical materials
   C. Ensure sterile technique
   D. Use caution when preparing skin for surgery
VII. PREPARATION
A. Arrange for visual aids equipment.
B. Collect materials.

VIII. INTRODUCTORY REMARKS/ACTIONS
A. Read Learning Outcomes in the text with students to introduce the chapter.
B. Ask, “What types of surgery would you think are classified as ‘minor surgery’?”
C. State, “Today we are going to get ready to do some surgery. After we discuss the material, I will demonstrate the procedures for you.”

IX. PRESENTATION
A. Surgical Asepsis
1. Uses practices known as sterile technique
B. Sterile Principles
C. Methods of Sterilization
D. Common Surgical procedures
1. Performed in provider’s offices and clinics
2. General list of office surgical procedures
E. Alternative surgical procedures
1. Method used determined by provider’s preference
   a. Electrosurgery
      (1) Uses electric current in concentrated areas to cut or destroy tissue whenever pathological examination is not required
      (2) Equipment needed
      (3) Uses
      (4) Advantages
   b. Cautery
      (1) Application of caustic chemical or destructive heat
   c. Cryosurgery
      (1) Destruction of tissue by freezing
      (2) Liquid nitrogen
      (3) Nitrous dioxide
   d. Laser Surgery
      (1) LASER = light amplification by stimulated emission of radiation
      (2) Converts light into intense beam
      (3) Specialty surgery
      (4) Precautions to take
F. Suture Material and Supplies
1. Suture/Ligature
   a. Hastens healing and lessens scarring
   b. Most come fused, or swaged, to needle and packaged in various lengths
2. Suture Needles
   a. Various types
      (1) Size
      (2) Shape
3. Staples
G. Instruments
1. Structural Features
   a. Form determines function
   b. Handles
   c. Ratchets
   d. Serrations
   e. Forceps
   f. Teeth
   g. Guide-pin
   h. Box-lock hinge
   i. Prongs
j. Hooks
k. Loops

2. Categories and Uses
   a. Three categories
      (1) Cutting
      (2) Grasping/clamping
      (3) Dilating/probing
   b. Cutting
      (1) Scissors and scalpels
   c. Grasping/clamping
      (1) Hemostats, forceps, clamps, and needle holders
   d. Dilating/probing
      (1) Specula, scopes, probes, retractors, and dilators

3. Care of Instruments
   a. Basic rules and rationales
   b. Ultrasound cleaner

H. Supplies and Equipment
   1. Sponges and Wicks
   2. Solutions/Creams/Ointments
   3. Dressings and bandages
   4. Anesthetics
   5. Drapes
      a. Injectable anesthetics
      b. Drawing techniques
         (1) Prior to applying sterile gloves
         (2) After applying sterile gloves
      c. Topical spray anesthetics
         (1) Applied to surface

I. Patient Care and Preparation
   1. Patient Preparation and Education
      a. Diet modification
      b. Medication adjustment
      c. Insurance approval obtained
      d. Postoperative period prepared for
      e. Allergies checked for
   2. Informed Consent
      a. M.D. informs patient of surgical procedure to be performed
      b. Describes actual procedure in lay terms
      c. Cites alternative treatments
      d. Lists possible undesirable outcomes and risks involved in procedure
   3. Medical Assisting Considerations
      a. Home health care
      b. Ability to follow standard instructions
      c. Financial ability to afford supplies needed
      d. Prior medical history
   4. Postoperative Instructions
      a. Should be written
      b. Should be clearly understood
      c. Include important telephone numbers
      d. Follow-up call
   5. Wounds and the healing process
      a. Open wounds
      b. Closed wounds
      c. Superficial wounds
      d. Deep wounds
      e. Intermediate wounds
      f. Inflammation
   6. Best treatment for infection is prevention; wound care is important
J. Surgery Setup (See Table 31-3)
   1. Basic rules and concepts for setup of surgical trays
K. Surgery Process
L. Preparation for Office Surgery (See Table 31-4)
   1. Applying sterile gloves (see Procedure 31-1 in the text)
   2. Setting up and covering a sterile field (see Procedure 31-5 in the text)
   3. Opening sterile packages of instruments and supplies and applying them to a sterile field
      (see Procedure 31-6 in the text and discuss the Critical Thinking box)
   4. Pouring a sterile solution into a cup on a sterile field (see Procedure 31-7 in the text)
   5. Preparation of patient's skin for office surgery (see Procedure 31-11 in the text)
   6. Using dry sterile transfer forceps

X. APPLICATION
   A. Use the Learning Outcomes at the beginning of Chapter 31 in the text as the basis for questions to assess comprehension.
   B. See the Classroom Activities section below for numerous application activities.
   C. Assign students to complete Chapter 31 in the Study Guide.
   D. Complete the Procedures in Chapter 31, using the Competency Manual to evaluate.

XI. EVALUATION
   A. Evaluate any assigned application activities.
   B. Evaluate student participation during presentation.
   C. Grade responses to Chapter 31 in the Study Guide.
   D. Evaluate student performance on Chapter 31 Procedures.

Classroom Activities
1. Arrange to have students observe minor surgery (one or two at a time) in a general or surgical practice. Request a facility tour if possible.
2. Arrange a tour of the local hospital and ask to have a person working in central supply or surgical supply show the students instruments and explain their operation, care, and use in procedures.
3. Obtain a catalog of medical and surgical supplies. Have students look up the operation, care, and costs of various instruments and supplies to gain a general knowledge of commonly used items.
4. Obtain disposable skin prep sets for students to practice with each other.
5. Bring a variety of surgical instruments into the classroom. Play a game of Name That Instrument. The students must correctly identify the instruments, pointing out at least two unique aspects of each and describing a scenario in which the instrument might be used.

Answers to Critical Thinking Boxes
What is the purpose of OSHA's Bloodborne Pathogen Standard and whom does it cover?
The purpose of OSHA's standards for bloodborne pathogens is to ensure employers provide a safe and healthful work environment for their employees. There are requirements employers must follow to ensure employee health and safety. Specifically, the bloodborne pathogen standard seeks to limit exposure to blood and body fluids when providing care to patients. The standard covers all employees who can be reasonably anticipated to come into contact with blood and body fluids as a result of performing their jobs.

You have removed a double-wrapped instrument pack from the autoclave and notice a small tear in the outermost wrap. The innermost wrap appears to be intact. What would your action be? Why?
The instrument is removed from all wrapping, resanitized, rewrapped, and resterilized. This action guarantees sterility of the instrument.

Dr. Woo asks you to assist him in repairing the laceration on Jaime Carrera's hand. Though you are unsure, you think you may have noticed a tiny hole in the palm of your left glove. What is your next step?
The next step you must take is to alert Dr. Woo of the situation. Then, you must unglove, rescrub, and reglove with sterile gloves.
You are setting up a sterile surgical tray and have already applied your sterile gloves before you realize you forgot to place the suture package on the tray. You have several options. What are they, and what are the advantages and disadvantages of each?

**The options are:**

- **Unglove and peel open the suture packages and apply to sterile field. Rescrub and apply new sterile gloves.**
  - **Disadvantages:** Necessary to take gloves off and rescrub, and it is possible for suture package to miss the tray and fall to the floor.

- **Have a coworker, if available, peel apart suture packages, and you can grasp them with your sterile gloves and place them on the tray.**
  - **Disadvantages:** None. **Advantage:** No need to unglove, rescrub, and reglove.

- **Have a coworker peel open suture packages, and you grasp it with sterile forceps and apply to tray.**
  - **Disadvantages:** None. **Advantage:** No need to unglove, rescrub, and reglove.

**Answers to Case Studies**

**Case Study 31-1**

Refer to the scenario at the beginning of the chapter. Distinguish between the types of surgery that would be performed in a high-volume patient practice and the surgery that would be performed in a smaller practice.

1. Where would the medical assistant begin when preparing the equipment for Dr. Beahm and the procedure?
   - The medical assistant would begin by pulling a preference card for the procedure. From the information on the cards, the supplies and instruments would be assembled.

2. Describe the process for assuring that the specimen obtained during the biopsy is delivered to the pathology lab in a condition to allow a diagnosis.
   - Once the specimen is obtained, it should immediately be placed in a specimen container that has been labeled with the patient’s name, ID number or birth date, date of procedure, and type of tissue. A laboratory requisition for the reference lab must be completed accurately with the patient’s demographics and the type of testing required. Follow the provider’s directions to determine if there needs to be a preservative added or if the specimen requires any special handling.

**Case Study 31-2**

Cele Little, an 84-year-old patient at Dr. Beahm’s clinic, is having office surgery performed on Thursday morning. Her sister, Dottie Tate, also a patient and also in her 80s, will come with Cele. A friend from the local senior citizen center has offered to drive them to the center and home again. Dottie is more nervous about the procedure, the removal of a bothersome cyst, than Cele. After talking with the sisters about the procedure, clinical assistant Jessica Goodwin, RMA (AMT), MLT, realizes this and wants to reassure Dottie but also wants her to be prepared to be caregiver to Cele.

1. Where should Jessica begin in her communication with the two sisters?
   - Jessica should try to gently educate the sisters about the cyst removal procedure in order to allay any apprehension. She will need to ask questions regarding Cele’s general state of health and determine whether Cele has any known allergies. Jessica should note the date of Cele’s last tetanus booster. Jessica will also need to explain the need for a signed consent form, which is standard protocol before any minor surgery. Costs are sometimes discussed, but because the sisters are covered by Medicare and because the clinic accepts Medicare assignment, their only cost may be that of any prescription drugs.

2. What specific advice should Jessica give Cele and Dottie before the procedure?
   - The procedure should be fairly routine, especially because the cyst is not inflamed. However, the sisters still need to be instructed about what to expect during the procedure, approximately how long it will take, whether Cele needs to maintain a special diet before the procedure, and whether a special diet is needed after the procedure. If Dottie knows these specifics beforehand, she can shop and prepare for Cele’s minor surgery, which will probably make her feel less nervous about being the caregiver.

3. What instructions should Jessica give the sisters to follow after the procedure?
   - Jessica should give Cele and Dottie specific wound care instructions. She should provide written as well as verbal instructions and tell the sisters to check regularly for symptoms of infection. Jessica should also provide a telephone number that Dottie can call both during and after hours. Jessica should call the sisters within the first
postoperative day to check on Cele's condition. Jessica can also provide for a community agency, such as the Visiting Nurse Association, to check on the sisters and teach Dottie how to check for infection or help with any other problems that can arise.

**Case Study 31-3**

Letisha Brown has been scheduled to have a nevus excised from her upper back by Dr. Beahm.

1. **Explain how Jessica would prepare her for the surgery.**

   **Patient preparation for excision of a nevus:**
   a. Cleanse hands and greet patient.
   b. Offer restroom facilities.
   c. Escort to procedure area.
   d. Check to see if patient followed preoperative instructions.
   e. Review postoperative instructions.
   f. Check for signed consent form.
   g. Have patient remove clothing from waist up. Provide gown, drape, and pillow.
   h. Position patient comfortably.
   i. Prepare patient's skin for surgery.

2. **Explain how Jessica would care for her after the surgery.**

   **Postoperative care for Letisha consists of:**
   a. Checking vital signs
   b. Allowing the patient to rest, if necessary. Remain with the patient for her safety.
   c. Assisting the patient off table and assisting her to dress.
   d. Reviewing written instructions with Letisha and caregiver.
   e. Scheduling a follow-up appointment.
   f. Documenting postoperative instructions in the patient's record.

3. **What will become of the excised nevus? Explain your actions.**

   The excised nevus will be carefully placed in a labeled biopsy container with a preservative (formalin). A laboratory requisition or request form will be attached to the specimen container. The specimen will be placed in a biohazard transport bag and sent or taken to the laboratory, and documentation will be made in the patient's record.

**Answers to Certification Review**

1. c. To prevent microorganisms from entering the body during an invasive procedure
2. c. Provide the provider a separate container for contaminated instruments
3. c. 4-0
4. a. Vicryl
5. b. To reduce blood flow in the operative site through vasoconstriction
6. d. Incise and drain the cyst
7. d. all of the above
8. a. 0 silk
9. a. Loss of sensation
10. d. all of the above

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