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Guideline Statement for Safe Medication Practices in the Perioperative Area

Introduction

With the emphasis on patient safety initiatives, AST recognizes the life-threatening potentials of medication errors in the perioperative setting; therefore, AST developed the following guideline statement to provide support to health care facilities in the reinforcement of safe medication practices in the perioperative setting.

The purpose of this Guideline Statement is to provide an outline that health care workers (HCWs) in the perioperative setting can use to develop and implement policies and procedures for safe medication practices. The protocol examples are presented with the understanding that it is the responsibility of the health care facilities to develop, approve and establish policies and procedures for the safe handling and administration of medications according to established hospital protocols, state medical laws, and federal medical laws.

Health care facilities should develop policies that mandate who shall be involved in the dispensing of medications in the perioperative setting. The policy should include who or which job classification may participate in the handling or administration of medications.

Additionally, it is recommended that health care providers in the perioperative setting complete continuing education in order to stay current in their knowledge of safe medication practices and administration. It is also recommended that available new information be used to update and revise existing safe medication policies and procedures for the O.R., and/or develop, evaluate and adopt new policies.

Definitions

Dispense: interpreting, evaluating, and implementing a medical order, including preparing and delivering a drug or device to a patient or caregiver in a suitable container appropriately labeled for subsequent administration.

Administration: direct introduction of, or the application of, a drug into or on the body of a patient by injection, inhalation, ingestion or any other means and, where required by law, shall occur only pursuant to a medical order.

AST Guideline Statement

A Certified Surgical Technologist (CST) and a Certified First Assistant (CFA) are qualified to handle and administer medications in the O.R. under the direct supervision and order of the surgeon. The following protocol is presented with the realization that it is the responsibility of the health care facilities to develop, approve, and establish policies that are protocol specific.

Six Basic Rights of Drug Handling

- The right patient
- The right drug
- The right dose
- The right route of administration
- The right time and frequency
- The right documentation

Safe Medication Practices

- Transfer of a medication to the sterile field
- Labeling all medications
- Having the surgical technologist in the scrub role (STSR) confirm the medication as it is received.
- The STSR will announce the name of the medication and its strength as it is passed to the person who will administer it.
- Monitoring patients for adverse reactions
- Original medication container should be kept as a reference until the operating procedure is completed.

Example Protocol for Medication Handling and Administration in the O.R.

1. All medications and solutions should be double checked by the circulator and STSR, using the physician preference card for accuracy. All medications should be verified by the physician before being delivered to the sterile field.

Suggestions: Circulator and STSR verbally corroborate use of physician preference card to confirm correct medications and solutions have been obtained prior to delivering to the sterile field. Physician verbally confirms the correct medications for use during the surgical procedure.

2. All solutions, dyes and chemicals must be clearly labeled in the O.R.

Suggestions: Label each item as it is received on the sterile back table. This will help reduce the chance of error.

3. Method of transfer of medication to the sterile field will be based on the type and route of medication/administration. Controlled substances may require a different type of handling, according to individual state policy. Sterile technique must be used in transferring medications to the sterile field.

Suggestions: Medications from a vial may be transferred to the sterile field by one of three methods.

- A. The circulator will clean the stopper in the top of the vial if necessary, and use a sterile transfer device, such as a sterile vial spike to pour the medication into a sterile receptacle on the back table.

- B. The circulator will clean the stopper in the top of the vial if necessary, draw the substance into a syringe with the use of a needle, and eject the medication into the proper receptacle on the field.
- C. The circulator will clean the stopper in the top of the vial if necessary and hold the vial upside down, while the STSR withdraws the substance into a syringe with the use of a needle.

Suggestions: Medications from an ampule may be transferred to the sterile field by one of two methods.

- A. The circulator will remove the top of the ampule, draw the substance into a syringe with the use of a needle, and eject the medication into the proper receptacle on the sterile field.
- B. The circulator will remove the top of the ampule and hold the ampule, while the STSR withdraws the substance into a syringe with the use of a needle.

Medications from a tube are squeezed onto the sterile field by the circulator using sterile technique. Medications from a used tube should not be used from case to case.

4. All solutions, dyes and chemicals must be verbally and visually inspected before being transferred to the sterile field.

Suggestions: Before the transfer of any medication or solution between the circulator and the STSR, the item must be verified verbally by stating the name of the item, strength, expiration date and dosage. Avoid using confusing abbreviations, symbols or acronyms. The item should also be visually checked by both the circulator and the STSR before the transfer.

5. When passing medications or solutions to other members of the sterile surgical team, verbally and visually verify the medication or solution being passed.

Suggestions: Always verbally announce the medication or solution being passed. Sometimes surgeons ask for one thing, when they really mean something else!

6. Immediately following transfer of a medication to the sterile field it must be labeled.

Suggestions: Use a sterile, preprinted drug label or create a label using a sterile marking pen and a blank sterile label. All containers on the sterile field (including irrigation solutions) must be labeled. When labeling a syringe, do not cover the increments with the label. If there is ever any question concerning the identity or strength of a medication, immediately discard it.

7. Discard any solution, medication or chemical that is not clearly labeled.

Suggestions: When relieving the circulator or STSR during break or shift change, verbally and visually verify all solutions and medications on and off the sterile field.

8. Original medication container(s) should be kept as a reference until the surgical procedure is completed.

Suggestions: All medication containers or solution containers should be kept in a designated area (eg top of case cart) in the O.R until the procedure is completed, and the patient has left the room.

9. The patient must be continually monitored for any adverse reaction from the medications or solutions used during the procedure.

Suggestions: Following all procedures, in particular when a local anesthetic has been administered, the circulator and STSR should monitor the patient as the dressing is placed, and the patient is moved from the O.R. table for any physiological changes that could suggest an adverse reaction.

Competency Statement	Measurable Criteria
<p>1. CSTs and CFAs are qualified to handle and administer medications and solutions in the O.R. under the direct supervision and order of the surgeon.</p>	<p>1. Educational standards as established by the <i>Core Curriculum for Surgical Technology</i> and <i>Core Curriculum for Surgical Assisting</i>.^{1,2}</p> <p>2. Medications, including calculating dosages and conversions, and preparation and management of medications and solutions, and anesthesia techniques are included in didactic studies as a student.</p> <p>3. Handling and administration of medications and solutions are practiced with skill check-off exams in the mock O.R. setting as a student.</p> <p>4. Students handle and administer medications and solutions during clinical rotation, and are evaluated by preceptors and instructors on the proper handling and administering of the medications and solutions.</p> <p>5. CSTs and CFAs perform the handling and administration of medications and solutions in the perioperative setting as practitioners.</p>

	6. CSTs and CFAs complete continuing education to remain current in their knowledge of medications and solutions
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References

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