DO-NOT-RESUSCITATE ORDERS IN THE PERIOPERATIVE ENVIRONMENT: A MULTIDISCIPLINARY QUALITY IMPROVEMENT PROJECT

Malgorzata Baumann, BSN, RN, CNOR; Shelley Killebrew, MSN, RN, CNOR; Katherine Zimnicki, DNP, RN, ACNS-BC; Katherine Balint, DNP, RN, APHN-BC, CRRN

PURPOSE
To describe a quality improvement project that aimed to improve compliance, nursing involvement, and communication related to do-not-resuscitate (DNR) orders in the perioperative environment.

METHODS
• Distributed surveys before and after a DNR educational fair to measure nurses’ knowledge of DNR orders, knowledge of the hospital’s current DNR process and communication expectations, and attitudes toward and comfort level with surgical DNR orders.
• Covered the following at the 3-day educational fair: general DNR orders, DNR policy at the institution, national DNR guidelines, the Patient Self Determination Act, implications of DNR orders during surgery, the nursing scope of practice related to DNR orders and the nurse’s role in reevaluation, and simulation of speaking to a patient about his or her DNR order before surgery.

RESULTS
• General DNR knowledge significantly improved for 3 out of 4 survey items post intervention.
• Nurses’ attitudes and comfort with surgical DNR orders significantly improved for all 8 survey items post intervention, including confidence in the discussion about DNR orders with surgical patients, comfort with what to discuss, and knowledge that discussing DNR orders is within a nurse’s scope of practice.
• Familiarity with DNR reevaluation and communication with other health care team members significantly improved for all 4 survey items.
• Compliance with institutional policy related to DNR reevaluation increased by 75% post intervention.

KEY RESOURCES
Full-Text Article
AORN Position Statement on Perioperative Care of Patients With Do-Not-Resuscitate or Allow-Natural-Death Orders

KEY TAKEAWAYS
Health care providers should be comfortable with hospital policies and national guidelines related to reevaluating DNR orders before surgery. Nursing education focused on reevaluating DNR status for the surgical period can effectively prepare nurses to address this issue with patients.
Phases of Care
Preoperative, intraoperative, postoperative

Relevant Specialties
Transplantation

Procedures
Face transplantation

Perioperative Roles
Perioperative nurse, surgical technologist, anesthesia care provider, surgeon

BACKGROUND
• Staff members may be presented with unique challenges when caring for a donor and recipient undergoing face transplantation.
• Research has shown single-stage transplantation to be technically feasible and ethically appropriate; however, concerns remain about complications because face transplantation is not considered a life-saving procedure.
• Patients must be carefully screened; recipients must have extensive tissue damage and have exhausted conventional reconstructive surgical options.
• Recipient exclusion criteria may include significant comorbidities, pregnancy, risk of malignancy from immunosuppression therapy, or a high likelihood of noncompliance with postoperative requirements.

IMPLICATIONS
• Challenges include less familiarity with the surgical procedure and instrumentation, an increased amount of equipment and personnel in the OR, specialized donor and recipient admission and discharge care, and increased shift length.
• Preprocedure nursing education should include a face transplantation clinical pathway, information on the level of commitment and the duties required from staff members, the relevant immunosuppressive and medication therapies for recipients, best practice updates regarding tracheostomy care, a review of microvascular free-flap management, and care specific to the donor and recipient undergoing facial transplantation.
• Complications from face transplantation may include loss of the transplanted graft, infection, acute or chronic rejection, and metabolic disorders.

KEY RESOURCES
Full-Text Article
AORN Guideline for Autologous Tissue Management
AORN Position Statement on Perioperative Safe Staffing and On-Call Practices

KEY TAKEAWAYS
An organized plan of action, staff member education, and appropriate staff-to-patient ratios for all phases of care for the donor and the recipient are crucial to the success of face transplantation. Team member commitment and intense preparation will enhance a face transplantation program.
Phases of Care
Preoperative, intraoperative, postoperative

Procedures
Surgeries requiring use of equipment that emits radiation

Perioperative Roles
Perioperative nurse, anesthesia care provider, surgical technologist, surgeon, radiologist, radiation safety officer, radiation technician

HOW-TO GUIDE
• Keep body parts that are not being x-rayed out of the path of the radiation beam or shielded.
• Position patients closer to the image intensifier and farther from the x-ray tube of the fluoroscopy unit.
• For pregnant patients, place a lead shield over the pelvis to protect the fetus. Pregnant team members should wear a radiation monitor under their waist shield and wear a maternity lead apron.
• Team members should keep the greatest distance possible from the radiation source, wear lead aprons or use shielding devices, and wear radiation monitors.
• Inspect protective equipment for integrity and store properly.

STRATEGIES FOR SUCCESS
• All facilities with the potential for radiation exposure must establish a radiation safety program.
• A radiation safety program must include a list of approved equipment operators, a method of documentation, measures for protecting patients and personnel from radiation exposure, procedures for handling radioactive body fluids and tissue, and requirements for using radiation monitoring devices.
• A radiation safety program should include equipment selection processes, competency assessment, quality assurance, protective device testing, patient education, and radiation seed sterilization.

KEY TAKEAWAYS
The diagnostic and therapeutic capabilities that are afforded by using radiation can have multiple benefits for patients. However, patients and perioperative personnel can experience side effects related to radiation exposure, and therefore it is essential to follow adequate precautions to limit radiation exposure.
CLINICAL ISSUES

Mary J. Ogg, MSN, RN, CNOR; Esther M. Johnstone, DNP, MSN, RN, CNOR

PURPOSE
To provide answers to AORN members’ clinical questions based on current evidence.

During pain management procedures at a surgery center, some of the RNs are operating the miniature fluoroscopy unit (ie, mini C-arm). Is it within my scope of nursing practice to operate a fluoroscopy machine?

- Federal and state legislation and regulatory requirements determine who can operate fluoroscopy equipment.
- Only those qualified, as determined by medical staff members, may operate radiologic devices. Several states restrict operation to personnel who can demonstrate successful completion of formal education and training in radiation physics, radiobiology, radiation safety, and radiation management.
- The health care organization’s radiation safety program should include a list of approved equipment operators and the necessary qualifications for the equipment operator for each type of radiologic device based on state regulatory requirements.

Key Resources: AORN Guideline for Radiation Safety

A surveyor recently questioned staff members about wearing personal protective equipment (PPE) after completing the instrument decontamination process. Is there any evidence to support wearing PPE while preparing clean instruments for tray assembly?

- Personnel must wear PPE when exposure to blood or other potentially infectious material is anticipated.
- In the semirestricted area, surgical attire and clean head covers should be worn and PPE such as gloves, gowns, eye protection, and masks or face shields should not be required.
- If personnel have concerns related to anticipated exposure to potentially infectious material, PPE should be worn as needed to protect the perioperative team member regardless of the area.

Key Resources: AORN Guideline for Prevention of Transmissible Infections; AORN Guideline for Surgical Attire; AORN Guideline for Sterilization

For more details and to find questions and answers on the topics below, read the full column.

- Patient education after radionuclide implantation
- Safe staffing patterns
- Counting instruments when laparoscopy procedures convert to open procedures