

CLINICAL ISSUES

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Tucking patients' arms and general positioning

QUESTION: I am the educator in our OR and am planning to do an overview of safety considerations for patients who are in the supine position during a surgical procedure. One question that comes up repeatedly is whether to tuck the patient's arms when he or she is in a supine position. Our anesthesia personnel say we should not tuck patients' arms, but there are times that the surgeons prefer it. What does AORN recommend? What other positioning considerations should I include in my overview?

ANSWER: AORN's "Recommended practices for positioning the patient in the perioperative practice setting," states that the patient's arms should not be tucked at his or her sides when positioned in a supine position unless it is necessary for surgical reasons. There is an increased risk for tissue injury and compartment syndrome in the upper extremity when the patient's arms are tucked tightly at his or her sides with sheets. There are increased risks for interference with physiologic monitoring (eg, blood pressure monitoring, arterial catheter monitoring) and unrecognized IV infiltration, which may interfere with delivery of intraoperative anesthesia medications and resuscitation efforts during an emergency.¹ If the patient's arms are not tucked tightly enough, there is a risk for them to become unsecured during the procedure.

To prevent injuries to the ulnar nerve and brachial plexus when the patient is in the supine position, the perioperative nurse should attach padded arm boards

to the procedure bed at less than a 90-degree angle. He or she should place the patient's arms on the arm boards with the palms up and fingers extended. The patient's shoulder abduction and lateral rotation should be kept to a minimum, and the patient's extremities should not drop below procedure-bed level. When there are surgical reasons to tuck the patient's arms at his or her sides, the perioperative nurse should position the draw sheet to extend above the patient's elbows and tuck the draw sheet between the patient and the procedure bed's mattress. The nurse should also be sure the patient's elbows are slightly flexed, the wrists are in a neutral position, and the palms are facing inward.^{2,3}

Patient assessment and continuous monitoring throughout the procedure for the risk of pressure injury to tissue and pressure or stretching injury to nerves are key concepts that should be included when designing education for perioperative nurses on preventing OR-acquired injuries. In addition to the surgeon's history and physical, it is important for the perioperative nurse to perform and document a preoperative nursing assessment to determine the patient's tolerance for the planned operative position and to identify preexisting conditions. Additional precautions should be taken when positioning the patient for the surgery or invasive procedure if the patient

- is 70 years of age or older;
- is morbidly obese (ie, has a BMI of greater than 40 or weighs 100 lbs or more over his or her recommended weight);
- is thin, small in stature, or has a poor

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- preoperative nutritional status;
- has diabetes or history of vascular disease;
- has a noted risk for pressure sores (eg, a Braden Scale score that is less than 20); or
- is undergoing a procedure planned to last longer than four hours.^{1,4,5}

The preoperative assessment also should include identifying patient jewelry and body piercing accessories so these can be removed, as needed, before the patient is positioned or transferred to the procedure bed.

The perioperative nurse should continuously monitor the patient's body alignment and confirm that the patient's

- head is in a neutral position and placed on a headrest,
- head and upper body are in alignment with the hips,
- legs are parallel, and
- ankles are not crossed.

In the supine position, the patient's bony prominences should be protected to redistribute pressure applied to the occiput; scapulae; thoracic vertebrae; olecranon processes (ie, elbows); sacrum/coccyx; calcanei (ie, heels); and ischial tuberosities. The patient's heels should be elevated off the underlying surface whenever possible. The patient's fingers should be in a position that is clear of procedure bed breaks or other hazards, and the patient's body should not be in contact with metal portions of the procedure bed. For prolonged procedures, the perioperative nurse should communicate with anesthesia personnel and the surgeon every two hours to assess the need to reposition the patient.^{1,4}

Other nursing interventions for the patient in the supine position include, but are not limited to the following:

- monitoring for patient dignity and privacy during transport, transfer, and positioning;
- selecting appropriate positioning equipment to protect, support, and maintain the patient's position based on the patient's identified needs;
- placing a pillow under the back of the patient's knees to relieve pressure on the lower back; and
- inserting a wedge under the patient's right side to displace the uterus to the left and pre-

vent supine hypotensive syndrome if the patient is pregnant.^{1,3}

The perioperative nurse should apply safety straps carefully to avoid nerve compression injury and compromised blood flow.⁶ The nurse should check for excessive pressure to the patient's tissue by placing his or her hand between the safety strap and the patient.⁷ After positioning the patient, the perioperative nurse should reassess the position of the safety strap as it may shift and apply increased pressure as a result of the repositioning or the addition of extra padding.¹ Patients who are obese may exceed the length limit for a regular-sized safety strap. It may be necessary to use two separate safety straps to decrease the risk of the patient falling off the procedure bed due to instability and weight load shifts. Under these circumstances, the nurse should place one safety strap across the patient's thighs and one over the patient's lower legs.⁸ Sheets should not be substituted for inadequately sized safety straps.

Members of the surgical team should not rely on the safety strap as a primary means to protect the patient from falling off the procedure bed. Education presentations should emphasize the importance of ensuring that a member of the surgical team is immediately available to attend to the patient at all times when the patient is on the procedure bed.

Patient positioning is an important aspect of the care plan for patients who are undergoing surgical or other invasive procedures, and it requires a collaborative effort between the surgeon, the anesthesia care provider, and the perioperative nurse. Aligning the patient properly, redistributing pressure, protecting the patient from tissue and nerve injuries, preserving IV access and physiological monitoring, and providing appropriate exposure for the procedure are all important considerations for safe and effective patient positioning.

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Service dogs in health care facilities

QUESTION: Recently, our ambulatory surgery center (ASC) scheduled a patient who is blind for surgery. The preoperative telephone interview included a discussion about the patient's seeing-eye dog that would be accompanying the patient on the day of surgery. Our ASC does not have a policy to cover this situation. What is AORN's recommendation for policies about animals in health care facilities?

ANSWER: AORN does not have a specific recommendation about service animals. The Americans with Disabilities Act (ADA) Title III is very clear, however, about the requirement to allow people with disabilities to bring their service dogs into normally accessed public areas of businesses and organizations that serve the public.¹ Hospitals, medical offices, health clubs, and restaurants are among the public facilities listed. Although not specifically listed, an ASC or office-based surgery facility would also be obligated to comply with the ADA requirements.²

When developing policies for service animals, it is important to be in compliance with state and local regulations. AORN's "Recommended practices for traffic patterns in the pe-

rioperative practice setting"³ also can serve as a resource for developing a policy regarding service animals and to which areas the animal can accompany the patient or family member. Street clothes are permitted and traffic is not limited in areas designated as unrestricted;³ therefore, it is logical that the facility policy would allow service animals full access to unrestricted areas of the ASC.

To decrease the patient's anxiety, there may be times when it is preferred to allow the service animal into certain areas designated as semi-restricted (eg, preoperative holding area, postanesthesia care unit), in which case, AORN's "Recommended practices for surgical attire"⁴ also can serve as a resource. Hair should be covered in semi-restricted areas and a single-use cover suit may be used when persons enter a semi-restricted area for a short amount of time.^{3,4} These same principles can be applied to animals in that their hair should be covered (Figure 1). Other considerations include

but are not limited to the following:

- Health care personnel, whether direct or indirect care providers, should be prohibited from petting or playing with the service animal.
- Service animals should not be allowed to



Figure 1 • Service dog in "surgical attire" appropriate for semi-restricted areas. (Photograph courtesy of Delta Society)