

### AORN GUIDELINES FOR TUCKING ARMS

- Safety restraints should be applied carefully to avoid nerve compression injury and compromised blood flow.<sup>42</sup>
- The patient's body should be protected from coming in contact with metal portions of the procedure bed.
- The patient's heels should be elevated off the underlying surface when possible.<sup>4</sup>

VIII.c.S. When on the procedure bed, the patient should be attended by surgical team members at all times.

A lack of clear communication about who should be watching the patient after the safety straps are removed or before the patient is transferred has been reported as a contributing factor for patient falls in the operating room.<sup>211</sup>

VIII.d. The number of personnel and required equipment should be adequate to safely position the patient. (PNDS: 164, 1138)

Inadequate numbers of personnel and/or equipment can result in patient or personnel injury.

VIII.e. The perioperative registered nurse should actively participate in monitoring the patient's tissue integrity based on sound physiologic principles. (PNDS: 115, 142, 164, 196, 1145)

VIII.f. The perioperative registered nurse should implement general positioning safety measures including, but not limited to, the following:

- Positioning equipment should be used to protect, support, and maintain the patient's position.
- Padding should be used to protect the patient's bony prominences.
- The patient's arms should be positioned to protect them from nerve injury.<sup>1</sup>
- The location of the patient's fingers should be confirmed to ensure they are in a position that is clear of procedure bed breaks or other hazards.

- The patient's head and upper body should be in alignment with the hips. The patient's legs should be parallel and the ankles uncrossed to reduce pressure to occiput, scapulae, thoracic vertebrae olecranon processes (ie, elbows), sacrum/coccyx, calcaneae (ie, heel),<sup>124</sup>

and ischial tuberosities.<sup>5</sup>

- The patient's head should be in a neutral position and placed on a headrest.
- A pillow may be placed under the back of the patient's knees to relieve pressure on the lower back.<sup>12</sup>
- If the patient is pregnant, a wedge should be inserted under the patient's right side to displace the uterus to the left and prevent supine hypotensive syndrome, caused by the gravid uterus compressing the aorta and vena cava.<sup>46</sup>
- If patient is attached to a robot, caution should be used before moving either the patient or the robot. (PNDS: 177, 192, 196, 1139)

VIII.f.i. **Unless necessary for surgical reasons, the patient's arms should not be tucked at his or her sides when in the supine position. If there are surgical reasons to secure the patient's arms at his or her side with the use of a draw sheet, the draw sheet should extend above the elbows and should be tucked between the patient and the procedure bed's mattress.**<sup>144</sup>

When a patient's arms are tucked tightly at his or her side with sheets, it may add unnecessary pressure on the tucked arms and may lead to tissue injury and ischemia. It may also cause interference with physiologic monitoring (eg, blood pressure monitoring, arterial catheter monitoring) and result in an inability to resuscitate during an emergency due to unrecognized IV infiltration in the tucked arm. There is also an increased risk for the patient to develop compartment syndrome in the upper extremity!<sup>7</sup>

## AORN GUIDELINES FOR TRENDLENBURG POSITIONING 2009

VIII.j. The perioperative team should implement measures to reduce the risk of injuries when positioning the patient in the Trendelenburg's and reverse Trendelenburg's positions. (PNDS: 13,111,177, 196, 1122)

When the patient is in Trendelenburg's position, excessive pressure on the clavicle can compress the brachial plexus as it exits the thorax between the clavicle and the first rib. **Morrell closed claims files revealed that brachial plexus injuries were related to the use of shoulder braces and the head-down position.**<sup>51</sup>

Positioning a patient with a history of heart failure secondary to increased venous return and increased pulmonary blood flow in a steep, head-down tilt

Trendelenburg's position can lead to visual loss related to decreased venous return from the head.<sup>5</sup>VIII.j.1. Measures should be taken to prevent patient from sliding on the procedure bed. **Risk for shear injuries increase when changing the patient's position from supine to Trendelenburg or reverse Trendelenburg.**

may adversely affect heart function. Trendelenburg's position causes redistribution of the blood supply due to increased

Circulatory response changes can be rapid and dramatic when moving the patient into or out of Trendelenburg's position. During surgery, there is gravitational flow of blood away from the surgical field, which can mask significant blood loss. The patient may be hypotensive as a result of hypovolemia when returned from Trendelenburg's position to the supine position. Cerebral blood flow may fall as venous and intracranial pressure rises; therefore, patients with known or suspected intracranial pathology should not be placed in Trendelenburg's position if it can be avoided.<sup>12 4</sup>

VIII.j.2. **To prevent injury to the shoulders, brachial plexus, or feet in Trendelenburg's or reverse Trendelenburg's positions,**<sup>41 42 49 00</sup> **shoulder braces should be avoided.** And a padded footboard should be used for reverse Trendelenburg's position.