Taking the Fear Out of Postanesthesia Care in the Intensive Care Unit

Mary Beth Hegedus, RN

This article was written for intensive care unit (ICU) nurses who find themselves having to recover surgical patients from anesthesia, whether they are critical care patients or acute care patients to be transferred to a regular nursing unit after recovery. Intensive care orientation programs may not adequately address the care of postanesthesia patients. This inadequacy manifests itself in the stress that intensive care nurses experience in caring for their patients. It may also present as a discomfort among anesthesia personnel with leaving a patient in the ICU postoperatively, and a lack of rapport between ICU nurses and anesthesia personnel. This article presents specific, practical information about nursing care of patients recovering from anesthesia, building on the existing assessment and interventional skills of the critical care nurse. It discusses the roles of the anesthesiologist, nurse anesthetist, and the postanesthesia care unit (PACU) nurse, and the types of anesthesia often seen in ICU recovery patients. It also covers preparation activities that can make the recovery process progress smoothly and offers tips and suggestions based on the author’s experience related to special needs of postanesthesia patients that differ from the typical ICU patient. [DIMENS CRIT CARE NURS 2003; 22(6): 237-244]

Do you or your staff hate “wake-ups?” Does an anesthetist’s report sound like Greek to you? Does the stress level in your unit go up? There are ways to decrease the stress of caring for postanesthesia patients, without having to add staff (since most hospitals haven’t the budget for staff additions). This article will help you confidently prepare and safely care for your postanesthesia patients. You will learn about the different types of anesthesia, what to observe, what to do, when to intervene, and what to document. You will also learn about the roles of the anesthetist and the PACU nurse in caring for the postanesthesia patient.

- TYPES OF ANESTHESIA
  General
  General anesthesia is the method used when the surgery requires that the patient be unconscious and/or paralyzed. The patient is usually given an intravenous (IV), sedative/amnesic drug like midazolam first, then quickly paralyzed, intubated, and anesthetized. The patient is kept asleep with an anesthetic gas or some combination of narcotics, propofol, and neuromuscular blocking agents (see Table 1). Most of the inhalant is excreted initially through the lungs, but takes up to 24 hours to be entirely cleared. The paralyzers are reversed with an
TABLE 1 Anesthetic Agents and Adjuncts

<table>
<thead>
<tr>
<th>Inhalation Anesthetics</th>
<th>IV Anesthetics</th>
<th>Sedatives</th>
<th>Narcotics</th>
<th>Local, Spinal Anesthetics</th>
<th>Neuromuscular Blocks</th>
<th>Reversal Agents</th>
<th>Antiemetics/GERD Prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desflurane</td>
<td>Ketamine</td>
<td>Diazepam</td>
<td>Alfentanil</td>
<td>Procaine</td>
<td>Atracurium</td>
<td>Atropine</td>
<td>Benzquinamide</td>
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<tr>
<td>Enflurane</td>
<td>Propofol</td>
<td>Etomidate</td>
<td>Buprenorphine</td>
<td>Chloroprocaine</td>
<td>Cisatracurium</td>
<td>Edrophonium</td>
<td>Droperidol</td>
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<tr>
<td>Halothane</td>
<td>Lorazepam</td>
<td>Lorazepam</td>
<td>Butorphanol</td>
<td>Lidocaine</td>
<td>Doxcuronium</td>
<td>Glycopyrolate</td>
<td>Metoclopramide</td>
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<tr>
<td>Isoflurane</td>
<td>Methohexital</td>
<td>Codeine</td>
<td>Codeine</td>
<td>Methoprinacine</td>
<td>d-Tubocurarine</td>
<td>Neostigmine</td>
<td>Ondansetron</td>
</tr>
<tr>
<td>Nitrous Oxide</td>
<td>Midazolam</td>
<td>Fentanyl</td>
<td>Tetracaine</td>
<td>Mivacurium</td>
<td>Metocurine iodide</td>
<td>Neostigmine</td>
<td>Prolactin</td>
</tr>
<tr>
<td>Sevoflurane</td>
<td>Propofol</td>
<td>Hydromorphone</td>
<td>Propivacaine</td>
<td>Meperidine</td>
<td>Pancuronium</td>
<td>Pyridostigmine</td>
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<td>Meperidine</td>
<td>Etidocaine</td>
<td>Methadone</td>
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<td></td>
<td></td>
<td>Morphine</td>
<td>Succinylcholine</td>
<td>Bupivacaine</td>
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<td></td>
<td></td>
<td>Nalbuphine</td>
<td>Vecuronium</td>
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<td></td>
<td>Sufentanil</td>
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anticholinergic drug like neostigmine. This drug causes bradycardia and, therefore, is given simultaneously with glycopyrrolate or atropine. Timing is critical, as the duration of action of the paralyzing agents is longer than that of the reversal. If the reversal agent is given too soon, the patient can become reparalyzed and stop breathing when the reversal wears off.¹

Monitored Anesthesia Care
Monitored anesthesia care (MAC) is similar to general anesthesia in that the patient loses consciousness completely, including loss of reflexes. It requires some type of airway device, such as an oral, nasal, or laryngeal mask airway (a device that occludes the esophagus, and sits in the oropharynx). The airway does not pass through the vocal cords, and does not completely prevent aspiration of stomach contents). Usually the patient is sedated, having been given a fast-acting narcotic such as fentanyl, and a propofol infusion. When the infusion is stopped, the patient regains consciousness within minutes, without the disorientation usually associated with general anesthesia. MAC is used for short procedures such as D&Cs, foreign body removal, or implanting a venous port.¹

IV Sedation
With this type of anesthesia, the patient is deeply sedated, but retains reflexes. Recovery from sedation only requires oxygen, time, and monitoring of vital signs every 15 minutes for a short while.¹ It is not considered true anesthesia, and will not be discussed further in this article.

Spinal or Epidural
Spinal or epidural anesthesia involves injecting local anesthetic and/or narcotic into the subarachnoid or epidural space. Epinephrine is sometimes used in conjunction with the anesthetic to extend its duration of action. The patient is usually sedated to a degree. This form of anesthesia is favored for orthopedic procedures involving the lower extremities, and urologic procedures. Epidurals are sometimes used for gynecologic procedures, and are also used for certain thoracic procedures for postoperative pain control. The effects of the spinal anesthetic wear off in a descending pattern, with the perineal and coccygeal areas being the last to regain sensation. Because of the loss of sympathetic tone, these patients develop a relative hypovolemia, and are given large amounts (1500-3000 cc) of IV fluid during surgery. They often need adrenergic drugs such as ephedrine or phylephrine. Therefore, it is not uncommon for the uncatheterized patient to retain large amounts of urine. When the spinal begins to wear off, the kidneys begin to process all the fluid that was given in the OR, but the bladder is unable to function for several hours. Often it is necessary to catheterize the patient to avoid damage to the bladder.¹

Regional
Regional anesthesia is frequently used for hand and foot procedures, or for shoulder surgery. It involves injecting local anesthetic around a specific nerve, rendering the area distal to the nerve numb and, at times, paralyzed or weak. Often patients are given sedation prior to the
procedure. Some types you may see are called Bier blocks and interscalene blocks. Because of the large amount of local anesthetic used, these patients are monitored for cardiac and neurologic toxicity from systemic absorption of the drug. Recovery from this type of anesthesia will not be covered in detail in this article.

Local
Most people are familiar with local anesthetics such as lidocaine. Local anesthetics are used in conjunction with a general anesthetic for immediate postoperative incisional pain control. Local anesthetics are typically used for herniorrhaphies, laparoscopic procedures, and orthopedic or plastic surgery of the hand and foot. The anesthetic, with or without epinephrine, is injected locally around the incision during closure. If the patient awakens quickly, the local may have had insufficient time to start working, so the patient may initially need IV pain meds. If epinephrine has been used, expect to see some mottling or blanching of the skin. In the case of hand or foot procedures, the affected finger or toe may appear purplish. As long as capillary refill is less than three seconds, the circulation is sufficient. If not, the surgeon or resident should be notified immediately.1

PREPARE THE ROOM
In the first 10 to 30 minutes after anesthesia, changes can develop rapidly. It is important to have everything you'll need in the room with you. See Figure 1 for a list of must-have equipment. Other items to consider keeping in proximity, especially for major abdominal surgeries, are a nasogastric (NG) irrigation set with fresh saline, an extra connector for the NG tube and suction tubing (which is often misplaced between surgery and ICU), soft wrist restraints for the intubated patient, emesis basin, a towel and washcloth, and oral care swabs. Many of items may already be kept in each room (see Figure 1), but they are all useful. Extra suction controllers and tubing will be needed for patients undergoing thoracic surgery.

Many ICUs keep a special "wake-up" cart available that holds all of the above-mentioned items, plus needles and IV supplies; the carts can be locked when not in use. The cart may also contain copies of PACU policies and procedures, as well as any special forms such as preprinted orders for PACU, epidural infusions, patient-controlled analgesia, and separate flow sheets used by hospital staff. A list of important phone extensions and pager numbers also helps: anesthesia, respiratory therapy, phlebotomist, X-ray, resident, RN First Assistant (RNFA) or surgical assistant, admitting office, receiving nursing units.

PREPARE YOUR STAFF
Plan ahead! Every shift assignment should include an admission, transfer, or wake-up designee. When a wake-up is expected, arrangements must be made for care of the receiving nurse's other patient(s) for the first 30 minutes after arrival of the surgical patient. For major cases likely to have invasive lines (eg, multiple drainage tubes) it helps to have a second nurse available to record starting IV amounts, empty drains, and help with the patient's physical setup in his or her room. This leaves the primary nurse free to concentrate on assessing the patient and listening to the anesthesiologist's report. The secondary nurse can also review orders with the primary nurse and process any stat orders. The charge nurse is often a good choice for a secondary nurse because it is a time-limited function, and he or she will ultimately need to become familiar with the new patient. If each nurse knows what to do in advance, the whole process will go much more smoothly and efficiently, with much less confusion. Expect to take vital signs every 5 to 15 minutes for the first half-hour, depending on your hospital's policy and the patient's acuity.

In planning for anesthesia recovery patients, be sure to learn what your hospital's policies and protocols are regarding these special patients.2 Know the extubation criteria the patient must meet after anesthesia, and be aware that the process occurs much more quickly than weaning the typical ICU patient from a ventilator. Know the hospital's policy for pain relief—does a special pain management group handle pain control, or is pain control under the jurisdiction of the attending anesthesiologist? Does the anesthesia department employ nurse anesthetists (CRNAs) or anesthesia technicians? It is important to know exactly what a CRNA is permitted to do by law and hospital policy. Does the state give CRNAs independent prescriptive authority, or must they write verbal orders from the anesthesiologist like other RNs? Is the anesthesiologist actually in the building, and is he or she available in an emergency? The anesthesiologist is not much help to the ICU nurse if he or she is preoccupied in the operating room (OR). All these questions must be answered in order to develop a working relationship between ICU personnel and anesthesia staff.3

YOUR PATIENT ARRIVES: ASSESS!
Tip: This may seem obvious, but when the patient is delivered to your unit, lock the bed or cart! The bed is usually raised up to transfer the patient from the OR table to the bed, and this can make patient assessment difficult and unsafe if the bed is rolling out from under you.

Rule number one: Remember your ABCs, just like in cardiopulmonary resuscitation. The biggest dangers

November/December 2003 239
from anesthesia at this point are respiratory arrest due to airway obstruction, apnea or weak respirations, hemodynamic instability, and safety risk from altered mental status. Forget about the cardiac monitor until you have established the patient is indeed breathing well and getting oxygen. If the patient arrives without supplemental oxygen, apply oxygen via nasal cannula (3-5 L/min) or simple mask (6 to 15 L/min) before obtaining vital signs, unless the patient is obviously alert and oriented. The anesthetist will want to know respiratory rate, oxygen saturation, pulse, blood pressure (BP), and temperature, usually in that order. Do not forget to assess the sixth vital sign—pain level. Ask the patient, even though he or she may be unable to respond verbally. Your patient may be unable to comprehend a 1-to-10 pain scale at this point. Instead, simplify using a three-level pain analysis: a little, a lot, or somewhere in between. Even an apparently sleeping patient can be experiencing pain—look at the space between the patient’s eyebrows. Is it wrinkled? If so, how deeply? If the person is breathing at least 12 times per minute, and appears to be experiencing pain, do not hesitate to medicate. If you delay medication, by the time the patient is awake enough to verbalize his or her pain, the pain may be severe enough to require a substantially larger amount of narcotic to control it (see Figure 2).

**Tip:** It is standard anesthesiology practice to ensure that the PACU nurse receiving a patient from surgery is comfortable in accepting responsibility for that patient’s care. If you are unsure whether your patient is breathing well enough, speak up. The anesthetist must stay with the patient until you are satisfied that the patient is reasonably stable. Be careful not to abuse this practice; if you are uncomfortable with PACU patients, perhaps you need more experience or instruction in caring for them.

**Nurse Sensory Overload**

While you are doing your primary assessment, the anesthetist may be announcing his or her report. You are bombarded with information and haven’t the time to document it all; therefore, you must prioritize. This is easier than you might think: The patient is the first priority. If the patient is unstable, you and the anesthetist will be busy trying to remedy the situation. If the patient is stable, situate the patient on the monitors, make sure the IV works, and then listen to the report. Don’t panic if you miss something. Everything you need to know should already be documented on the anesthesia record.

**Tip:** It is a good idea to familiarize yourself with the anesthesia record your facility uses. Know exactly where to find the information you are seeking, such as the total intake and output during surgery, or when an antibiotic was given, even, for example, if your first set of vital signs will be on that page. It is okay if you haven’t a chance to document them immediately.

You should expect to see any of the following in the first 5 minutes: apnea or very shallow respirations; slow, irregular, deep respirations; highly irritable airway (coughing nonstop); agitation—resisting oxygen devices, moving all over the cart, sitting bolt upright; shivering; crying; or euphoria. If the patient is apneic, follow basic life support (BLS) procedures using an ambu bag and 100% oxygen to ventilate, and oral or nasal airway as appropriate. The airway should remain in place until the patient is able to remove it (you may have to assist). If respirations are weak or slow and irregular, usually stimulation and close monitoring of oxygen saturation and respirations suffice to keep the patient oxygenated. Occasionally you will see a patient whose face is ruddy or flushed, whose BP is very high, and whose respirations are shallow or obstructed. This patient is probably hypercapnic and needs ventilation, even though he or she may have a strong SpO2. Once the patient is moving a greater tidal volume consistency, the patient’s BP should return to baseline levels.

**LARYNGOSPASM**

One frightening experience in the first few minutes postoperatively is laryngospasm. It presents as a high-pitched crowing sound or no sound on inspiration, and marked anxiety. Supraventricular retractions are common, and very little air moves in or out, despite great

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**FIGURE 1.** Items to have in the room.
How do you medicate a patient who is just waking from anesthesia?

First, you need an order, preferably from the anesthesiologist. Barring allergies, IV morphine, fentanyl, and meperidine are most common in the PACU. Fentanyl acts the fastest, and it has the shortest duration of action. Fentanyl works within 1 or 2 minutes, and lasts 30 to 90 minutes. The usual dose is 50 mcg IV push, repeated at 5-minute intervals as needed up to a maximum established by the anesthesiologist or protocols. IV morphine and meperidine work in approximately 5 to 10 minutes, and last 1.5 to 2 hours. All of these drugs can cause hypotension and will depress the central nervous system, so each IV bolus must be followed with at least 20 cc IV fluid, and monitored closely for respiratory depression. Don’t be alarmed if your patient’s respiratory rate drops to 8; but remind the patient to breathe until he or she can do so without reminders. If the patient cannot take a deep breath on command, your patient needs immediate, aggressive intervention—get the bag-valve mask and call the anesthesiologist.

If your facility has protocols for pain medicine, keep them near for quick reference. In my PACU, dosages for morphine and meperidine are weight-based. For example, a dose of 2 mg increments up to a maximum of 0.2 mg/kg, and meperidine in 25 mg increments up to 2 mg/kg in most patients. Other facilities prefer to have individual orders written for each patient.

A cautionary note: Naloxone is a great drug for reversing narcosis, but it must be used with caution. The goal is to reverse the respiratory depression, not the analgesia. Even a 0.2 mg dose can reverse the narcotic enough to eliminate pain control. If at all possible, stimulate and bag an apneic patient for a few minutes first. Chances are the patient will start breathing without assistance, and will respond to commands to breathe deeply. Be sure the anesthesiologist remains in the area while you wait for the patient to breathe.

FIGURE 2. Pain control.

will suffice to restore adequate air exchange. Remove or at least partially withdraw the airway device that may be irritating the patient’s airway. Make eye contact. Tell alert patients to inhale slowly (it’s less irritating). Assure them that they will not be left alone, and that their breathing will soon improve. Sitting the patient in an upright position is also helpful. Do not leave the patient’s side.

For a more severe laryngospasm, more aggressive treatment is necessary. Maintain optimal airway position and provide 100% oxygen and ventilatory assistance with a bag-valve mask. If secretions are present, gentle airway suctioning is appropriate. The anesthetist may decide to sedate and re paralyzed the patient, necessitating placement of an oral or nasal airway and ventilatory assistance.

Once you are certain you have a clear airway and adequate gas exchange, move on to your circulatory assessment. Assess peripheral pulses. It is not uncommon to see tachyarrhythmias or bradycardias early during emergence from anesthesia. Your anesthetist will be able to tell you if the rhythm is volume related or drug induced. Check out your main IV. Make a mental note of how much fluid is remaining in the bag, and that it is infusing well. Often you will find the fluid infusing rapidly. Leave it alone until you have a BP. Then ask how fast the rate should be for PACU care—the rate ordered by the surgeon might not yet be appropriate.

Tip: Check to see if the urine bag has been emptied. Anesthetists sometimes estimate urine output without emptying the bag; if you do not know this, you could potentially double-count the estimated amount in your PACU output total.

Assess for hypovolemia, a very common problem when a patient has had NPO for more than 8 hours. Hypotension and tachycardia are cardinal signs of hypovolemia. So is a labile BP. For example, you give your patient morphine 2mg IV for pain. His systolic BP plummets from 128 to 92, more than you would have expected. It is likely he is hypovolemic. Give a 200 cc fluid bolus and reassess BP. Unless the patient has a documented history of congestive heart failure, it is safe to try a quick fluid challenge. An improved BP means you’re on the right track. If you are shy about giving large amounts of IV fluids, ask the anesthetist how much more fluid you can safely give the patient. The anesthetist may prefer pressors in small boluses if fluid overload is likely. Remember, many drugs given for anesthesia decrease vascular resistance, which will cause a relative hypovolemia. Spinal anesthetics cause a loss of sympathetic tone, creating the same effect. Fluids alone may be insufficient to return the patient’s BP to acceptable levels. In this case, doses of phenylephrine 50 mcg to 100 mcg or ephedrine.
Postanesthesia Care

5-10 mg may be given IV at 5-minute intervals for BP support until sympathetic tone returns.

Tip: Adequate fluid administration has been shown to reduce the incidence of postoperative nausea and vomiting.

Occasionally you may see a patient in pulmonary edema. This can happen from excessive IV fluids on a patient with a weak heart, after spinal anesthesia as sympathetic tone returns; or it can occur in much younger patients. It is not uncommon for an adult patient to receive two to three liters of IV fluid during spinal anesthesia. As the spinal wears off, vascular tone increases. When a spinal wears off quickly, it can increase cardiac load enough to cause pulmonary edema. Rarely, a healthy young patient can generate enough negative pressure at extubation to cause pulmonary edema. Thus, if your otherwise healthy patient’s lungs sound as if they are full of fluid, they might very well be. Trust your assessment findings. When in doubt, call the anesthesiologist.

The anesthesiologist should be able to tell you if the patient’s current BP is within normal range. Ask if the patient has been given any pressors or beta-blockers during surgery that you need to be aware of.

After the cardiac monitor has been attached, don’t be surprised if you see premature ventricular contractions (PVCs) or premature atrial contractions (PACs). These are a common side effect of many anesthetics, but you’ll want to rule out hypoxia and pain to be safe.

Taking a patient’s temperature seems so cliché, but immediately after surgery it can mean the difference between barely breathing and breathing well. Hypothermia is very common after surgery. Hypothermia is useful during longer procedures because it greatly reduces oxygen demand. During the surgical procedure limbs are extended, often exposed; abdominal organs are exposed, peritoneal fluid evaporates, and the surgical suite temperature is typically adjusted to the surgeon’s comfort. Hypothermia not only alters the oxyhemoglobin curve, but it also potentiates some of the drugs given during anesthesia, and can even affect coagulation. If you want your patient to wake up smoothly and without complications, it is crucial that the patient be warmed to at least 36° C in the early postoperative period. Use heated blankets, or for more rapid warming, a special warming blanket. These can be used during surgery, but unfortunately cannot cover all body parts in the operative field.

Tip: A shivering patient uses much oxygen. Do whatever possible to warm the patient. Sometimes a 12.5 mg dose of meperidine can relieve shivering; this can especially be useful when the patient is normothermic or is experiencing pain.

By now the anesthesiologist will have given you his or her report. It should include the following:

- the patient’s name,
- surgical procedure,
- name of the surgeon,
- type of anesthesia,
- allergies,
- drugs given,
- total IV fluids given,
- estimated blood loss, and
- urine and nasogastric tube output.

There may also have been intraabdominal fluid suctioned out during surgery; the fluid amount should have been estimated on the anesthesia record or in the circulating nurse’s notes. You will also be told how the anesthetic was delivered: mask, endotracheal (ET) tube, or laryngeal mask airway (LMA), and whether there was trauma or difficulty with intubation. Both ET tubes and LMAs can cause sore throat postoperatively. Any intraoperative problems with BP, heart rate, or excessive bleeding should be included in the anesthesia report. Significant history, such as diabetes, any chronic illness, recent infection or surgery, and drug, alcohol, or tobacco use are also part of the anesthesia report.

![Image](https://via.placeholder.com/150)

**YOUR PATIENT IS SETTLED IN**

Begin a surgery-related assessment. (eg, drainage tubes, dressings, peripheral pulses, temporal pulses [after carotid surgery]). Take care of STAT orders, especially lab tests, X-rays, and medications. Review the surgical and anesthesia orders. When you have a moment, include a brief chart review in your assessment. This task can be done by your secondary nurse while you assess the patient. You want to know the following:

- patient’s normal BP range,
- level of hydration,
- the time of the patient’s most recent narcotic,
- whether the patient has been given an antiemetic, and
- other allergies the patient may have.

Diabetics should have a postanesthesia blood glucose measured by finger stick.

Before the anesthesiologist leaves the bedside, make sure you have orders for pain meds, an antiemetic, IV fluids, parameters for fluid or pressor boluses, and vasoactive drips. The transfer nurse or anesthesiologist should ask if the patient will need oxygen after recovery. Your hospital may have policies covering many of these questions. For example, one hospital policy states a patient can leave the PACU without oxygen if he or she can maintain SpO2 at or above 92% for 15 minutes on room air. However, one anesthesiologist may be more comfortable with a 95% saturation, and writes the parameters accordingly. Also consider what your patient will be doing upon dis-
TABLE 2 Aldrete Scoring System

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>Motor</td>
<td></td>
</tr>
<tr>
<td>Moves all extremities</td>
<td>2</td>
</tr>
<tr>
<td>Moves two extremities</td>
<td>1</td>
</tr>
<tr>
<td>No movement</td>
<td>0</td>
</tr>
<tr>
<td>Respiration</td>
<td></td>
</tr>
<tr>
<td>Able to breathe deeply</td>
<td>2</td>
</tr>
<tr>
<td>Limited or dyspneic</td>
<td>1</td>
</tr>
<tr>
<td>Apneic</td>
<td>0</td>
</tr>
<tr>
<td>Blood Pressure (BP)</td>
<td></td>
</tr>
<tr>
<td>BP within 20% of baseline</td>
<td>2</td>
</tr>
<tr>
<td>BP within 50% of baseline</td>
<td>1</td>
</tr>
<tr>
<td>BP &lt; or &gt; 50% of baseline</td>
<td>0</td>
</tr>
<tr>
<td>Level of Consciousness</td>
<td></td>
</tr>
<tr>
<td>Alert</td>
<td>2</td>
</tr>
<tr>
<td>Arousal</td>
<td>1</td>
</tr>
<tr>
<td>Unresponsive</td>
<td>0</td>
</tr>
<tr>
<td>Oxygenation</td>
<td></td>
</tr>
<tr>
<td>O₂ saturation</td>
<td></td>
</tr>
<tr>
<td>&gt;92% without O₂</td>
<td>2</td>
</tr>
<tr>
<td>≥92% with O₂</td>
<td>1</td>
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Charge from PACU. Any patient with a patient-controlled analgesic (PCA) device delivering narcotic will be at greater risk for hypoventilation and hypoxia than one who will be on oxycodone, and may be better off leaving with oxygen.

It is wise to initiate the patient’s PCA before he or she is sent to a patient room. Logistical delays in transport can mean the patient is without pain medicine for too long, causing needless suffering.

Know your hospital’s PACU discharge criteria. You should have a reference book readily available that outlines discharge criteria. Normally the patient’s Aldrete score (see Table 2) should be at least an 8: Your patient should be alert enough to summon help or ask for pain medicine. The patient’s BP should be no more than ±20% of his or her normal range. The patient’s pain should be well on the way to being under control. Generally, the patient should be discharged no sooner than 10 to 15 minutes after the last IV narcotic was given. Report off to the receiving nurse as you normally would, including a summary of any special problems during surgery or recovery, such as laryngospasm, excessive bleeding, BP problems, and how these problems were resolved. Give intake and output totals for both surgery and PACU, and note any drugs given in PACU. Alert the receiving nurse to any special equipment the receiving unit may need—portable suction, oxygen flow meter, IV pump, or overhead trapeze.

A note to unit managers and educators: In my experience, I’ve found that a 1-day PACU orientation included as part of the ICU orientation is insufficient to assure competence in caring for postanesthesia patients. A formal didactic program should be included in the critical care orientation curriculum, and follow-up clinical experience should be of sufficient duration as to demonstrate the nurse’s competence and understanding of the nursing care needs of postanesthesia patients. Competence can be demonstrated by both written testing and by observation and signing off by a qualified PACU nurse, nurse specialist, or nurse educator.

CONCLUSION

Knowing what to expect from your postanesthesia patients will help you to anticipate their immediate critical needs when they are at their most vulnerable. Watching closely for respiratory changes, fluid shifts, and responses to medications, especially in the first 15 to 30 minutes after surgery, and intervening quickly and appropriately will help ensure that your patients make their way safely through the immediate postanesthesia experience. Most importantly, adequate instruction and preparation go a long way toward making your staff competent and comfortable in caring for this special patient population.

Acknowledgments

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References

3. American Society of PeriAnesthesia Nurses. Standards of Peri-
Call for Manuscripts

If you are a critical care nurse, nurse educator, nurse manager, nurse practitioner, or clinical nurse specialist or researcher, Dimensions of Critical Care Nursing would like to hear from you.

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Do not submit articles that have been previously published elsewhere or are under consideration for publication in other journals or books.

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