Chapter 3

Phase I and Phase II Recovery

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As early as 1751, at the Newcastle Infirmary in Newcastle, England, rooms were reserved for patients who had undergone major surgery or who were critically ill. Over 100 years later, Florence Nightingale prepared separate rooms for patients who were experiencing the immediate effects of anesthesia. By the 20th century, there were records of recovery rooms at Boston City Hospital in Massachusetts, Johns Hopkins Hospital in Maryland, Cook County Hospital in Illinois, and New Britain General Hospital in Connecticut (Barone, Pablo, & Barone, 2003).

By the late 1940s, the value of dedicated recovery rooms was gaining acceptance. An anesthesia study commission of the Philadelphia County Medical Society reported that postoperative nursing care could have eliminated nearly one-third of preventable postsurgical deaths during an 11-year period (Ruth, Haugen, & Grove, 1947).

1. How has the scope of perianesthesia services evolved?

The scope of perianesthesia services has expanded over the years in a number of ways. Advances in technology have allowed for more complex procedures to be done on an outpatient basis. Advances in the development of anesthesia medications have allowed for more rapid induction and less recovery time. In addition, there has been a vast increase in the volume of diagnostic and interventional procedures being done using a range of anesthesia techniques requiring close intra and postprocedure monitoring by perianesthesia nurses.

2. How is Phase I recovery defined?

Phase I is the level of care in which close monitoring is required and basic life-sustaining needs are of the highest priority (American Society of PeriAnesthesia Nurses [ASPAN], 2015). During this phase of care, perianesthesia nurses conduct assessments, engage in monitoring, and intervene to maintain airway patency and hemodynamic stability as well as manage pain, fluids, thermal comfort, and other aspects of patient care. The primary goal is to facilitate the transition of the patient from this level of care to Phase II level of care in preparation for discharge to home or to an inpatient setting for continued care.

3. What are the admission assessment recommendations for Phase I level of care?

Multiple and concurrent assessments occur upon admission to the Phase I level of care (ASPAN, 2015). A transfer of care report is delivered by the transferring provider. This report may include, but is not limited to, information regarding preoperative history, type and length of anesthesia, medications administered, type of procedure, relevant fluid status, and any actual or potential complications. The actual physical assessment of the patient includes ventilation and respiratory status, vital signs, pain and sedation levels, neurologic and neurovascular status, sensory motor status, integumentary and wound status, fluid status, and assessments specific to the actual procedure.

4. What are the most common patient care priorities during Phase I level of care?

The first priority for patient care in Phase I level of care is the establishment and maintenance of a stable airway with adequate ventilatory support. Determination of hemodynamic stability and the initiation of any interventions to support

cardiovascular function is also a priority. Another clinical priority in Phase I is the provision of adequate pain and comfort measures and the evaluation of the effectiveness of any multimodal techniques, including pharmacologic or nonpharmacologic interventions. An additional main concern is related to the actual impact of the surgical procedure and assessment of wound integrity.

5. What are some common potential complications during Phase I level of care?

Complications associated with Phase I level of care include airway compromise, cardiovascular depression, pain, nausea, vomiting, delirium, and disturbances in thermoregulation.

6. How long does Phase I last?

Determining when the patient is ready to move from one phase of perianesthesia care to the next is best determined by assessing the wide variety of reactions and responses to the administration of anesthesia, as well as the reactions and responses to the surgical/procedural experience. In addition to the individuality of patients, a number of factors impact the overall readiness to move (Clifford, 2009). These may include variables such as practitioner preference in anesthetic choices, the need for preoperative anxiolytics, a history of prolonged emergence, and the presence of preexisting medical conditions. The decision to move a patient from one level of care to the next should be based on clinical assessments and desired patient outcomes and criteria. The ASPAN Standards for Perianesthesia Nursing Practice provide comprehensive lists of assessment criteria that can be used for discharge from Phase I and Phase II (ASPAN, 2015).

7. What are the discharge assessment recommendations for Phase I level of care?

Patients are generally assessed prior to discharge from Phase I level of care to determine the following: adequacy of airway and ventilatory status, cardiac and hemodynamic stability, normothermia, management of pain and comfort, integrity of surgical wound and dressings, and fluid balance.

8. What are the staffing recommendations for Phase I level of care?

According to the ASPAN Standards for Perianesthesia Nursing Practice, it is recommended that two registered nurses, one of whom is a nurse competent in Phase I level of care, be in the same room/unit where a patient is receiving Phase I level of care (ASPAN, 2015). In general, one nurse can provide care to two patients who are described as follows:

- One unconscious, stable, without artificial airway, and over the age of 8 years and one conscious, stable, and free of complications
- Two conscious, stable, and free of complications
- Two conscious, stable, 8 years of age and under, with family or competent support staff present (ASPAN, 2015)

A patient–nurse ratio of one to one occurs at the time of admission until the patient is thoroughly assessed and determined to be stable, or if the patient has an unstable airway, or if the patient is 8 years of age and under and unconscious. The most seriously ill patients—those that are critically ill and unstable—require two nurses for safe care and recovery.

9. What are equipment recommendations for Phase I level of care?

Each patient care area where Phase I care is provided should have, but is not limited to, the following equipment:

- General stock supplies for patient care, including dressings
- Supplies for emergency and preemptive bedside response, including oxygen delivery devices, airways, and suction; equipment for measuring vital signs, ventilation, and cardiovascular monitoring
- Stock medications and intravenous fluids
- Patient warming devices
- Adequately stocked age-specific emergency carts
- Personal protective equipment (ASPAN, 2015)

10. How is Phase II recovery defined?

Phase II is the level of care in which clinical care and strategic planning are aimed at preparing the patient for return home or for transition to extended care for further observation.

11. What is the difference between Phase I and Phase II?

Phase I describes the level of care provided when a patient is emerging from surgical, diagnostic, or interventional procedures that require the administration of general or regional anesthesia or moderate sedation. The primary goals of nursing care during Phase I include the establishment and maintenance of a stable airway; hemodynamic stability,

including blood pressure and heart rate; fluid resuscitation; pain management; nausea and vomiting management; normothermia management; and assessment for wound integrity and bleeding. "Constant vigilance is required during this phase" (Clifford, 2009, p. 409–410).

Phase II describes the level of care provided when the patient is being prepared for discharge to home or an extended care environment. In this phase, the patient has a stable airway with good ventilatory status on room air (unless baseline status requires supplemental oxygen at home), satisfactory pain management (as defined by the patient), satisfactory control of postoperative nausea and vomiting, appropriate ambulatory ability for procedure and baseline, among other things (Clifford, 2009).

12. What are the admission assessment recommendations for Phase II level of care?

Upon transfer to Phase II level of care, a transfer of care report is delivered by the transferring provider. This report may include, but is not limited to, information regarding preoperative history; type and length of anesthesia; medications administered by anesthesia providers; and, during Phase I level of care, type of procedure, relevant fluid status, and any actual or potential complications. The actual physical assessment of the patient includes vital signs, pain level, neurologic and neurovascular status, sensory motor status, integumentary and wound status, fluid status, and assessments specific to the actual procedure.

13. What are the most common patient care priorities during Phase II level of care?

The focus of care during Phase II is preparation of the patient for returning home or for transitioning to extended care for further observation. Adequate patient knowledge for continued care at home requires thorough patient/family teaching and documentation of learning regarding discharge instructions.

14. What are some common potential complications during Phase II level of care?

Common issues requiring interventions during Phase II level of care include pain and nausea. Prolonged drowsiness may also occur as well as a persistent sore throat.

15. What are the discharge assessment recommendations for Phase II level of care?

Patients are generally assessed prior to discharge from Phase II level of care to determine the following: adequacy of pain and comfort interventions, hemodynamic stability, integrity of surgical wounds and dressings, safe transportation from the facility, and knowledge of discharge instructions.

16. How is "safe transportation" defined?

It is possible that, despite meeting the criteria for being discharged home, ambulatory surgery patients may experience varying degrees of sedation and psychomotor impairment following anesthesia. State regulatory agencies, accrediting organizations, and professional medical and nursing associations suggest that ambulatory surgery patients have a responsible individual accompany him or her home. This individual can function to ensure that the patient is transported home safely, that the patient can be assisted should minor issues related to pain or vomiting arise, and should be able to report any postoperative/postprocedure complications.

17. What are the staffing recommendations for Phase II level of care?

According to the ASPAN Standards for Perianesthesia Nursing Practice, two competent personnel, one of whom is a registered nurse competent in Phase II level of care, must be in the same unit where a patient is receiving Phase II level of care (ASPAN, 2015). In general, one nurse can provide care to three patients who are described as follows: over 8 years of age, or under 8 years of age with family present. A patient–nurse ratio of one nurse to two patients is possible when one patient is 8 years of age and under without family or support staff present and during initial admission of the patient postprocedure. If any patient should become unstable and require transfer to a higher level of care, the staffing should allow for one nurse to care for one patient.

18. What are equipment recommendations for Phase II level of care?

Each patient care area where Phase II care is provided should have, but is not limited to, the following equipment:

- General stock supplies for patient care including dressings
- Supplies for emergency and preemptive bedside response, including oxygen delivery devices, airways, and suction
- Equipment for measuring vital signs
- Stock medications and intravenous fluids
- Patient warming devices
- Adequately stocked age-specific emergency carts
- Personal protective equipment (ASPAN, 2015)

In addition, the unit should have adequate supplies for transferring the patient from the unit.

19. What does the term "blended unit" mean?

A "blended unit" is a unit that cares for patients who are preparing for surgery (preoperative phase), recovering from surgery (Phase I and/or Phase II), and/or who have recovered from surgery and are waiting for an inpatient bed. As a result of the expanding scope of services provided by postanesthesia care units, patients arriving in postanesthesia care units are no longer the traditional postsurgical patient. It is not uncommon to find patients in various stages of recovery from various levels of anesthetics administered for the purpose of interventional or diagnostic radiologic procedures, from sedation provided for endoscopic or colonoscopic exams, or for postprocedural monitoring.

REFERENCES

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