A Look at Best Practices for Patient Education in Outpatient Spine Surgery

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ABSTRACT

Following best practices for patient education helps ensure patients and their family members leave an ambulatory surgery center after a procedure with a functional understanding of all aspects of surgery, ongoing care, and postoperative expectations. Best practices for education of patients undergoing spine surgery in an ambulatory surgery center include a consistent and informed staff, involved patients and family members, patient-specific education, and continual reinforcement of that education. Patient education needs to include topics such as expectations, the recovery process, and pain control. AORN J 99 (March 2014) 376-384. © AORN, Inc, 2014. http://dx.doi.org/10.1016/j.aorn.2014.01.008

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An ambulatory surgery center (ASC) is a health care facility in which health care providers perform surgical, pain management, and diagnostic services for patients who are discharged home within 24 hours. Through treatment at an ASC, patients are able to receive elective surgical care in a highly specialized and controlled environment. Ambulatory surgery centers provide patients with an environment that is less rigid than that of the hospital, in which patients can have closer relationships with a single nurse throughout the surgical process, and even things as simple as meals can be given more individual attention. The setting affords nurses and other staff members the opportunity to provide more personal attention to patient care and education (Figure 1). This attention leads to greater patient satisfaction and helps patients manage their perioperative period and recovery, maximizing the benefits of surgery. A Press Ganey Associates report stated that “patients say they have a 92% satisfaction rate with both the care and service they receive from ASCs.”1(p19) A national average for hospitals, as reported by the US Department of Health and Human Services for the third quarter of 2012, is that 71% of patients would recommend their hospital to someone else for care.2

Implementing an established system of best practices is key in maintaining the consistency and effectiveness of delivery of care. In an ASC, adopting best practices means developing consistent but adaptable protocols for maximizing the benefits of ambulatory surgery and for dealing with the challenges of the outpatient environment (eg, limited time to care for the patient, staffing challenges because of census changes, a lack of ancillary departments to provide some services). This article defines and elaborates on best practices as...
they relate to patient education during the perioperative period for patients undergoing spine surgery in the ambulatory environment, but most of these practices are also applicable to other types of surgery.

**EFFECTIVE PATIENT EDUCATION**

The benefits of effective patient education extend to both patients and practitioners. Assisting the patient in developing a good understanding of specific symptoms and their role in the recovery often increases their trust in the process. Benefits of ensuring patient understanding include that it improves the patient’s ability to comply with the health care plan and leads to greater patient satisfaction.\(^3\) Physicians, nurses, and staff members work directly with patients through targeted education practices to help patients manage their personal health and health care decisions and to ensure that patients engage in a follow-up plan that decreases the risk of complications and improves their recovery and function.

All ASC personnel should be involved in an ongoing training program about the care and education of patients in their facility to help ensure consistency in the program and to provide guidance for assessing patients and individualizing care. Physicians should provide inservice programs as part of staff meetings on topics such as what surgical procedures involve, why surgeons choose them, and what restrictions are placed on patients afterward and why. Protocol should be thoroughly covered in personnel orientation and continued with detailed annual competency evaluations. Further, to ensure consistency of patient education, preference cards can be created for each surgeon and for particular procedures, including preoperative and postoperative care. Information should include preoperative anesthesia, postoperative preferences for dressings, mobilization, what to expect and whom to call, and any specific instructions for the OR nurse technician and other team members.

**Assessing Patients and Individualizing Care**

Patient education must be individually tailored to the patient’s surgical procedure, the surgeon’s
specific preferences, and the patient’s perception of expected recovery during every facet of the perioperative process. For example, individual patients differ in how they define terms relevant to their recovery, such as rest. Some patients need to be encouraged to mobilize, but some need to be told to rest more, even if the level of activity that these patients need is the same. If the patient is an overachiever, for example, then the nurse should emphasize the risks of doing too much too soon during the recovery process. Conversely, sedentary patients should be told that staying in bed all day can hinder their recovery. All patients should be helped to understand that recovery is a process of pain management, rest, and increasing activity.

A nurse who can assess patient education requirements quickly and adapt educational efforts to the patient is invaluable in both ASCs and hospitals. Nurses also need to be able to assess a patient’s ability to comprehend and retain education; because health information can be complex, it is best to start by assessing what the patient knows before coaching begins. Nurses need to use critical thinking skills to evaluate the personality type of the patient and his or her family members before discussing topics such as the likely timetable for recovery. Assessing pain is another important skill—every patient is different, so nurses in ASCs should take advantage of their ability to give each patient close attention. Nurses should assess the patient’s level of pain and the effectiveness of pain treatment, because, with close attention and the right plan, it is typically possible to control each patient’s pain.

Nurses should keep the principles of simplicity and reinforcement in mind during patient education. When patients must undergo spine surgery, they often are anxious and may have preconceptions, and both of these must be overcome to educate patients effectively. To address anxiety, sometimes a simple gesture, such as starting a patient’s admission on a personal note by saying, “Hello Mr Jones, I hope your daughter’s performance went well on Saturday,” or having a family member remain at the patient’s bedside may be enough to help the patient relax.

The patient’s preconceived notions are influenced by age, culture, learning ability, and language, all of which need to be considered when tailoring education to a specific patient. The United States is a diverse country, and health care providers need to be aware that a patient’s culture influences his or her health, and that individuals from similar cultural backgrounds vary substantially from one another. Although certain core values (eg, strong family structures) might generally be apparent in a particular cultural group, the strength of an individual’s belief in those core cultural values will also depend on the individual’s acculturation or integration into the mainstream culture of the United States.

For example, a patient’s family might think that the patient should remain on bed rest, even though the physician’s expectation is frequent walking, so the nurse needs to cater education and patient planning toward encouraging this activity and overcoming the family’s fear of it.

### Consistency of Education

Consistency of contact with patients and their family members (ie, imparting the same message each time) is vital. In an ASC setting, patients frequently interact with the same nurse throughout their stay, so consistency in a patient’s education is easier to manage than in a hospital. Having the same nurse helps to ensure that the information given to the patient is reinforced multiple times in a similar manner and, therefore, is more likely retained. There are four primary opportunities for perioperative nurses to provide the bulk of the information that a patient needs: in the surgeon’s office, during the preoperative telephone call, on admission, and after surgery before discharge. Suggested practices for this process are summarized in Table 1.

The initial foundation for patient education is laid down by the surgeon, the physician’s assistant, the RN, the nurse practitioner, and office staff...
members. This foundation mainly consists of a basic review of expectations with regard to

- pain and its management,
- mobilization,
- expected stay,
- activity course, and
- typical symptoms.

This education is then reinforced throughout the duration of the patient’s stay in the facility. These steps help to ensure that patients and their support group approach the recovery period with confidence and the correct information.

During the patient’s visit to the surgeon’s office is when informed consent begins. The surgeon discusses the risks, benefits, and alternatives to the proposed procedure with the patient during this visit. It is important to take the time and verify that the patient understands the consent process and that he or she has no further questions. By reiterating the information, the nurse can reaffirm that the patient understands the diagnosis, procedure, or test, and is able to make an informed decision.

As part of the preoperative telephone call or during the preoperative patient visit to the facility, nurses should help patients and their family members develop a discharge and recovery plan. By developing this plan early and reinforcing the specifics throughout the perioperative process, nurses and other staff members can drastically reduce postoperative discomfort and risk for complications.

One advantage that hospitals and other large institutions have over ASCs is the ability to provide a preoperative class to prepare patients for surgery. An ASC can make up for that because the environment is conducive to flexibility and managing patients individually. Having patients come to the facility before surgery can be an effective method. This visit is, in essence, a preoperative class. Showing the patient around, talking to him or her, and reviewing what is expected helps to set and maintain a healing mindset and assuage patient concerns. This visit is also a good time to review the patient’s understanding and expectations of the surgery, talk about what will happen during the intraoperative period, teach the patient how to get in and out of bed, find out whether the patient needs any equipment at home (eg, grabbers, raised toilet seats, ice, sequential units), and answer any questions that he or she may have.

Discharge instructions help ensure that the patient and his or her caregivers approach the recovery period with confidence and the correct

### TABLE 1. Suggested Practices for Educating the Patient Undergoing Spine Surgery in an Ambulatory Environment

- Nurses should meet with the patient and his or her family members in the facility before surgery.
- The nurse who makes the preoperative telephone call should review postoperative activity restrictions, bowel care, and pain management expectations.
- The nurse who admits the patient should have the patient’s coach, caregivers, and family members in the room during admission.
- The admitting nurse should admit the patient into a private room so he or she feels comfortable talking freely.
- All personnel should introduce themselves by name and role to the patient and his or her family members.
- All personnel should communicate with patients cheerfully and confidently.
- Surgeons should educate personnel about specific cases and what they have told patients.
- Staff members should be required to educate one another when one staff member was not present for education from a surgeon.
- Personnel should keep preoperative and postoperative surgeon education preference cards for every surgery.
- A nurse should make postoperative telephone calls on day one, day three, and one week after surgery for support and to answer the patient’s questions.
information. Discharge information must be printed and should clearly state what is normal and to be expected when recovering from anesthesia. Patients should have their discharge medications with them before departing the facility. This minimizes potential problems, such as a pharmacy being unable to fill a prescription quickly, and ensures that the patient will have the medicine he or she needs at home. Additionally, discharge instructions should clearly outline

- any restrictions,
- dietary considerations,
- minimum activity requirements,
- medication instructions,
- wound care instructions,
- when to call the physician,
- the timeline for follow-up appointments, and
- whom to call in case of an emergency.

“Clearly delineated post-procedural orders provide the basis for patient safety after the patient leaves the health care organization.”

**DISCHARGE INSTRUCTIONS**

“Patients, families, and significant others should have an active role in transfer of patient information processes whenever possible.” Patients learn about many subjects in the course of their perioperative experience. The patient and his or her family members should leave an ASC with a clear understanding of

- the procedure that took place,
- expectations for recovery,
- any physical limitations that must be taken into account,
- what is normal and what is not,
- when to seek help, and
- how to obtain advice.

Adequate patient education during discharge planning should discuss

- physical activity;
- short- and long-term expectations;
- prescribed medications;
- pain management;
- bowel care; and
- how to obtain advice after hours, including how to contact the physician.

It is important to educate surgical patients about safe postoperative movement and activity. With regard to patients who undergo spine surgery, this includes limiting bending, lifting, and twisting. Patients also should be taught that pain should be used as a guide through the process of recovery. Patients need to listen to their bodies. If an activity (eg, walking, sitting for too long) hurts, then the activity needs to be limited. Patients should think of the neck and lower back as load-bearing joints, much like a knee. It is easy for patients to understand that after knee surgery, they should not stand on that leg all day because it would most likely hurt and swell. The same applies to the cervical and lumbar spine. This seems self-explanatory to health care professionals, but it is vitally important to make clear to patients.

It is vital for the patient to understand the typical course of recovery so that if something is out of the ordinary, he or she will call the appropriate health care provider. Nurses need to stress that patients will undergo fluctuations in their progress during recovery from spine surgery. Patient education should be specific enough that the patient knows exactly what is going to happen (eg, it is normal to expect some leg pain postoperatively) but broad enough that the patient is not surprised by variations in symptoms from one person to the next (eg, some patients experience leg pain and some do not, both are normal postoperative spinal surgery courses). Like any other surgery, spine surgery has several phases during the recovery period. For example, the majority of patients undergoing spine surgery feel relief of symptoms immediately after surgery. However, it is typical that patients experience some reoccurrence of symptoms in the first few weeks. After other surgeries, such as an appendectomy, a patient will improve significantly each successive day. It is important that nurses and
staff members educate patients about this so they know what to expect and do not become alarmed. Clear descriptions of what is to be expected are important to allay fear as symptoms come and go.

The patient and his or her family members should understand how they can reduce the risks of surgery, particularly with deep breathing and leg exercises. Nurses should demonstrate how to perform leg exercises preoperatively and ensure the patient performs them throughout his or her ASC stay, and also make sure he or she understands that these exercises should be performed at home as well to help prevent postoperative deep vein thrombosis.

Before the patient leaves the facility, the nurse should give the patient and the patient’s family members the necessary medications and other supplies to take home; family members can pick up these medications from the pharmacy while the patient is in the ASC. Having the supplies and the medicine with the patient before discharge and reviewing medication orders with him or her reduce confusion and allow the nurse to identify the specifics of dressing changes and medication routines before the patient returns home.6 “The perioperative RN should use the discharge medication plan to educate patients and their designated support persons about how to implement the plan in their aftercare setting.”6(p274)

Patients are encouraged to maintain normal blood sugar levels; limit alcohol use; and take calcium, multivitamins, and B complex vitamin supplements postoperatively. On discharge, patients should be given a care package that includes dressings and supplies for showering, and a small bottle of hand sanitizer for family members to use after they wash their hands but before they change the patient’s dressings. Without proper education, these simple measures to assist recovery may not occur to the patient, but, with proper education, patients can make positive decisions for their health.

FAMILY SUPPORT

Patients who undergo surgery in an ASC generally go home much sooner than patients who undergo surgery in a hospital. This reduces costs and strain on the facility but also makes the patient’s postoperative support system throughout the recovery process more important. The people in that support system, whether they are family members or friends, should be educated as much or more than the patient.

The Joint Commission mandates that client and family member education should be part of comprehensive care, in which education is any set of planned activities designed to improve patients’ health behaviors and health status.4 The input that patients receive from family members, physical therapists, primary care providers, and friends varies dramatically. Patients and their friends and family members may have doubts that must be addressed by keeping the educational messaging consistent throughout the process. Personnel in ASCs should, if possible, admit patients to private rooms, and their family members should be welcomed at the bedside for the preoperative interview and after surgery. Patients should have the privacy of an environment where they can share information freely.

In ASCs, the support person should be present with the patient throughout as much of the process as possible preoperatively and after the patient is stable in recovery; in a hospital setting, this is not necessarily possible, and this is an important distinction. Having a second person, or a coach, present for the preoperative discussion through recovery and discharge often helps patients retain information and carry out instructions after discharge. A coach is typically a family member or
close friend, someone the patient trusts and who will be available to help throughout the time after surgery, and someone with whom the patient is willing to share all of his or her personal information. Because of anxiety, patients may not retain all of the presented information or may forget critical parts of their health history. Having a coach involved throughout the perioperative process helps minimize errors and patient concerns.

Both patients and their family members need to be comfortable with what is required of them for patient safety and infection control, including

- assistance mobilizing,
- hand washing,
- dressing changes and wound management,
- ensuring that home linens are clean,
- not allowing animals on the bed, and
- sexual activity.

Because of the nature of spine surgery, the combination of reduced mobility, narcotics, and anesthesia causes many patients to have difficulty having bowel movements. Patients and their family members should be made aware of how to reduce the chance of constipation postoperatively with the use of increased fluids, dietary fiber, stool softeners, and laxatives. Nurses should assertively address constipation and discuss this possibly sensitive issue openly.

PAIN CONTROL

In providing pain control education to a patient, it is important that the nurse ensure that the patient is aware of the large variety of options to control pain without using narcotics. A large part of postoperative pain management includes nonpharmacologic methods, such as relaxation, guided imagery, and music; using ice to reduce surgical swelling and discomfort in the early postoperative period; and taking warm showers after the incision is healed to ease pain and stiffness. The specifics of dosage, type of medicine, and degree of activity will vary from patient to patient, and it is up to the nurse to help navigate these choices. The underlying mission, however, remains to minimize discomfort and return the patient to normal function.

“Effective communication between the patient, designated support person(s), and perioperative team members enhances the patient’s capacity for medication self-management after discharge.”6(p273)

For nurses to be able to educate patients about pain management effectively after spine surgery, they need to have a good understanding of what the procedure entails. The advantage of an ASC setting is that nurses are either cross-trained to work in the OR or, at a minimum, undergo orientation that involves rotating into the OR so that they understand the procedure and can help manage the patient’s pain.

Before surgery, nurses should discuss what patients should expect after the surgery, both physically and mentally. At this time, the nurse can provide the patient with printed material on the information presented. For example, patients undergoing spine surgery should be warned to avoid bending and twisting, taught how to effectively use pain medication, and provided with a timeline for the stages of recovery and return to full function.

Decisions regarding medication made before surgery help determine medication choices. “During the preoperative nursing patient assessment, the perioperative RN should identify unique patient considerations that require additional precautions or contradictions related to [minimally invasive surgery] procedures, fluid management, and the medications that may be added to irrigation fluids.”8(p163)

Determining specific considerations early on helps make medication choices simpler. In an outpatient setting, it is best to start a patient on the same medication in the postanesthesia care unit that he or she is prescribed for use at home. This helps prepare the patient for what to expect and rules out any possible complications of these medications while in a closely supervised environment.

Pain is an important indicator of function and limitation, and it is important for patients to be aware of the role of pain in recovery. If pain
medication is necessary to achieve comfort, then the patient should take it as ordered. However, patients should never use pain medication to allow them to do activities that they could not perform comfortably otherwise, and pain medication should be accompanied by rest. For the patient, this is the biggest shift from his or her preoperative methods for treating pain. Preoperatively, the patient often take pain medications to continue working, exercising, or performing activities of daily living. After surgery, however, the patient needs to change his or her mindset; that is, if pain medication is taken, then the patient should rest and not use the medication to facilitate doing things that he or she could not do without the medication.

There are two different components of a patient’s pain and discomfort during recovery from most spinal surgeries. First is the incision, which can be soothed with ice, warm showers, and rest. More complex and difficult to manage is the compressed nerve root pain that was present before surgery. Surgery removes the pressure from the nerve, but the natural healing process takes time. Nurses should prepare the patient for postoperative nerve discomfort that will often come and go for roughly six to eight weeks. For patients who are more active, a useful analogy is to equate the nerve to a smoldering fire—it takes a long time to calm down, and, too often after surgery, the patient will feel good, overdo it for just one day, and have a recurrence of leg pain. This is a common problem. It is easy for pain to flare up but it often takes a long time to calm down.

In ASCs, staff members generally teach patients to use small amounts of medication early and often, and move to using oral medications while in the ASC within the first hour after surgery whenever possible and for the duration of their stay in the facility. Additionally, some patients are sensitive to pain medicine. These individuals require the least amount of medicine possible to control pain and encourage healing. The patient should take the medication with food and maintain a regular dosage schedule. For patients who are sensitive to medication, it is best to begin with a small dose and add to it as necessary. Patients should be instructed to set an alarm clock the first few nights to around 4 AM so that they can eat something, take a pain pill, and go back to sleep. Doing this, they will wake up more comfortable and gain confidence in their recovery.

An example of the importance of patient education surrounding pain control is the use of ibuprofen. This medication is ideal to assist some patients in the transition from narcotics when they have had spine surgery. Patients undergoing a spinal fusion, however, are typically told not to use ibuprofen, because healing of the fusion requires an inflammatory process, and slowing down this process by using anti-inflammatory medications, such as ibuprofen, can slow down the fusion.9

CONCLUSION

Best practices for educating individuals undergoing spine surgery in an ASC relies on three major factors: consistency of information, involvement of the patient’s family members or support group, and clear explanations of what to expect and how to navigate postoperative pain management. Although specifics may vary widely between individual patients and procedures, the underlying messaging, treatment modalities, and flow of information from personnel to the patient must remain consistent to achieve maximum effectiveness. Nurses can
overcome the challenges of providing patients with the proper knowledge, tools, and education to navigate the recovery process safely and efficiently outside of a controlled medical environment with the optimum results. Following these best practices will increase patient satisfaction, increase safety, and ensure a smoother perioperative process for both practitioners and patients.

References

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