Population of heavier patients demands planning, education

With over 60% of adults in the US overweight, and half of those obese, health care facilities need to be prepared for a population of heavier patients.

Most dramatic is the rapid rise in clinically severe obesity—100 lb or more overweight—which is increasing twice as fast as obesity in general. Severe obesity is more serious for a person’s health and creates added challenges and expense for health care.

Many hospitals have programs specifically for weight-loss surgery, one of the nation’s fastest-growing procedures. But increasingly, every hospital and health care facility needs to be competent in the care of large patients. Obese patients have a variety of needs, ranging from sensitive care to proper equipment. Among issues requiring attention from OR managers and directors are:

• education of staff to meet psychosocial as well as physical needs
• clinical management, including protocols that address aspects of care such as pressure ulcer prevention, sleep apnea, and difficult airways
• ergonomics for patient and staff safety
• special equipment to meet the needs of heavier patients.

This issue of OR Manager examines issues in caring for obese patients.

Clinical management

Obese patients present challenges for assessment and care planning.

In planning care, draw on resources in your institution, suggests Judy Crouch, RN, MSN, APRN, BC, weight management and bariatrics nurse practitioner at Mercy General Health Partners in Muskegon, Mich. Anesthesiologists can provide information on airway and pain management. The hospital pharmacist can assist with proper medication dosing. Ostomy nurses have expertise in skin care, and physical therapists can help in managing patient transfers and mobility.

Hospitals are beginning to develop model protocols for care of the obese. One of the first such protocols is scheduled to be published this spring in Ostomy/Wound Management by authors led by Susan Gallagher, RN, PhD, CWOCN, a wound and ostomy nurse who specializes in clinical and ethical aspects of caring for obese patients.

This is an overview of clinical issues perioperative nurses and physicians need to be prepared to manage.

Preoperative planning

Good communication with surgeons’ offices and clinics helps ensure information is received before obese patients arrive for surgery.

“The sooner you have a heads up, the better,” says Crouch. That allows time to gather the proper equipment, including rental if necessary, which is important not only for patient care but sensitivity.

The staff’s look of surprise when a large patient arrives can be insulting, as can comments such as, “Guess we’ll need the big-boy table for this one,” or when taking a blood pressure, “This cuff is too small. Where’s the thigh cuff?”

Crouch suggests having a kit with items such as an extra-large blood pressure cuff, tourniquet, assessment tools, and proper-sized gowns.

Being weighed is a particularly sensitive issue. Make sure suitable scales are available. “Weighing should be done in private, without comment,” Crouch emphasizes. “People are embarrassed and fear they will be lectured about their weight. I’ve heard of patients being sent to the loading dock to be weighed, which obviously is inexcusable.”

Obesity in adults

- Extremely obese 5% (BMI 40 or higher)
- Obese 31% (BMI 30 or higher)
- Overweight 29% (BMI 25 or higher)

She believes obese patients should be seen for a nursing assessment before the day of surgery, rather than simply being screened by phone—“the needs of these patients are too specific.”

**Preparation of the OR**

Provide advanced notice to the OR staff and anesthesia providers to allow for adequate time for vascular access, airway evaluation, skin prep, and other activities, advised Janine Gesek, RN, MSN, program manager for risk management services at ECRI, who spoke recently in an ECRI audioconference on surgery for the obese patient.

“You also will want additional instruments on hand and sufficient personnel to assist in moving and positioning the patient prior to the procedure.”

Maintaining a sterile field can be more difficult than for a normal-sized patient. The surgeon and assistants may need to use step stools to obtain proper access.

**Anesthesia, airway management**

Anesthesia and airway management require careful assessment and planning. Patients who are severely obese have short, thick necks and large tongues, which can make intubation difficult and increase the risk of airway obstruction. They also have a variety of respiratory and cardiac issues, such as reduced lung capacity and function; potential for aspiration, atelectasis, and pneumonia; impaired lung compliance and resistance; obesity hypoventilation syndrome (formerly known as Pickwickian syndrome), and hypertension.

Obese patients need experienced anesthesia providers who understand the risks and take precautions so as not to get into the situation of “unable to ventilate and unable to intubate.”

“Develop a competency list or use an existing one related to difficult airway intubation and reassess competency on a routine basis,” Gesek advises. Have alternative rescue airway devices available, such as a laryngeal mask airway or bougie.

Staff in the recovery room should be competent in the immediate care of obese patients, particularly ventilatory support.

Obese patients have a high prevalence of obstructive sleep apnea, which can cause serious postoperative complications. The physiology of obstructive sleep apnea is “intimately linked to obesity,” according to a recent review by Gami and colleagues. Nasal CPAP (continuous positive airway pressure) is the initial treatment of choice for most patients, these authors say, but has limitations because many patients don’t like to use it. Hospitals are developing sleep apnea assessment protocols to help address the risks. (See February *OR Manager*.)

**Pressure ulcer prevention**

Obese patients are at high risk for decubiti, particularly if they have long procedures. They may already have been immobile at home and had trouble turning themselves in bed, which increases their risk.

Gallagher recommends developing a pressure ulcer prevention plan, which should be a multidisciplinary effort that includes perioperative nurses.

“When patients move from department to department, nurses don’t always see consequences of their care,” she observes. For example, OR and ICU nurses might not see the results of pressure injuries that develop later on the med-surg unit.

Gallagher believes there is a correlation between prolonged surgery and the risk of pressure injury, though there is no guideline for the length of the procedure. She advises each organization to develop its own criteria based on its patient population and procedures performed.

“Patients are filing claims against hospitals for pressure injuries that developed in the OR,” Gallagher says. Claims may be filed even though the patient had early signs of a pressure injury when admitted.

“The recommendation is to do a thorough skin assessment before patients
enter your OR. Think about the criteria you would use to decide which patients need a thorough skin assessment.” (See January 2003 OR Manager.)

Wound healing

Obese patients have impaired wound healing, discussed in a recent review by Wilson and Clark. A major challenge is avoiding complications such as seroma, hematoma, infection, and wound separation. Clinicians need an understanding of the changes in body systems induced by obesity and how these impede wound healing.

Obese patients also are susceptible to other skin problems, including candidiasis and dermatitis. Some suggestions:

- Maintain clean, dry skin. Be aware patients may be embarrassed to ask for help.
- Be aware that skin folds can lead to skin irritation, breakdown, and pressure ulcers. Judy Davidson, RN, MS, a clinical nurse specialist who has written about care of obese patients, advises lifting, cleansing, and drying all skin folds. Reinspect folds often to make sure lines and tubes aren’t caught in the folds.
- Allow enough time for the skin prep to dry and separate skin folds.
- Avoid letting the patient lie on tubes, catheters, wires, and cords, particularly for procedures longer than 1 1/2 hours, because these can cause pressure necroses. Consider tube holders for these devices.
- Be aware that most bariatric patients have chronic candidiasis, which can be aggravated by wound drainage, urinary incontinence, or simple perspiration.
- Understand that obese patients are predisposed to wound separation because of moisture, skin folds, and increased intra-abdominal pressure, which creates tension on wound edges.

Patient positioning

Positioning must consider a variety of issues in addition to the surgery including airway management.

If appropriate for the procedure, reverse Trendelenburg’s position (head up) is preferred because it increases the ability to ventilate the patient. Having the patient in Trendelenburg’s (head down) makes ventilation difficult and can be dangerous.

Placing the Foley catheter probably should be done after the patient is anesthetized because it saves embarrassment, Gallagher suggests. Additional staff members in addition to the person placing the catheter will likely be needed to hold the legs and expose the urethra. Patients should be secured to prevent sliding.

Pain management

Pain management presents challenges in obese patients. Most have chronic pain, which makes assessing their acute pain more difficult, Gallagher notes. They also metabolize medications differently than other patients because of their higher percentage of body fat. Obese patients are susceptible to the “resedation phenomenon,” in which lipophilic anesthetics and sedatives are redistributed from the fatty tissue back into the bloodstream. This can be life threatening if not identified in a timely manner, notes Davidson.

Crouch recommends consulting with the hospital pharmacist “if there is any doubt about dosing.”

DVT prevention

Obese patients are at high risk for deep vein thrombosis (DVT) and pulmonary embolism. In a new report of a prospective registry of 5,400 patients with ultrasound-confirmed DVT, 27% had obesity as a comorbidity. Pulmonary embolism is a leading cause of mortality in patients having bariatric surgery.

A bariatric surgeon, David Martin, MD, of Comprehensive Surgical Specialists in southern California, initiates DVT prophylaxis before surgery, which includes
a combination of subcutaneous heparin injection, early ambulation, and knee-high stockings with a sequential compression device (SCD).

“The key with bariatric surgery is to get patients out of bed quickly,” he says.

Costly care

Hospitals will have to meet needs of obese patients for the most part without additional reimbursement.

Gallagher says there is hope that as clinicians develop protocols for care of obese patients, some will study whether preventive measures help reduce costs by avoiding expensive complications. If and when that information becomes available, managers and clinicians will have more evidence to take to administrators and insurers to justify additional education and equipment that is required to provide safe care for these patients.

Rona Scott and DeNene Cofield, RN, BSN, CNOR, of Medical Center East will present an all-day seminar on bariatric surgery at the OR Business Management conference May 12 to 14 in Albuquerque.

Cofield will also present a breakout session, Caring for the Obese Patient in the OR, at the Managing Today’s OR Suite conference October 6 to 8 in Chicago.

Conference brochures are at www.ormanager.com

References


Gallagher S. Postoperative care of the bariatric patient. Perspective in Nursing Online. www.perspectivesinnursing.org


Fast facts about obesity

Body mass index

Body mass index is a measurement of the level of obesity.

\[ \text{BMI} = \frac{\text{Weight in pounds} \times 703.5}{(\text{Height in inches})^2} \]

Clinically severe obesity

Clinically severe obesity is increasing much faster than obesity overall. Between 1986 and 2000, the prevalence of people with a body mass index (BMI) of:

- 30 or greater doubled
- 40 or greater quadrupled
- 50 or greater increased by a factor of 5


Costs

- Moderate obesity (BMI 30 to 35) is associated with health care costs 20% to 30% higher than normal weight. A BMI over 35 is associated with a 60% to 70% increase. With a BMI of 40 or more, costs double.
- By 2020, 1 in every 5 health care dollars in 50- to 69-year-olds will be spent to treat health consequences of obesity.


Some hospitals estimate additional costs of treating or accommodating the severely obese can reach up to $500,000 a year per institution.


Health impact

- Obesity appears to lessen life expectancy, particularly for young adults. White men aged 20 to 30 years with severe obesity could lose up to 13 years of life, and white women could lose 8 years.


- About 300,000 US deaths a year are associated with obesity and overweight (compared with 400,000 for cigarette smoking).
- Overweight and obesity “could wipe out some of the gains we’ve made in areas such as heart disease, several forms of cancer, and other chronic health problems.”


Comorbidities of morbid obesity

- Arthritis
- Sleep apnea
- Gallstone disease
- Hypertension
- Lipidemia
- Diabetes mellitus
- Cardiac dysfunction
- Respiratory dysfunction
- Urinary stress incontinence
- Menstrual and fertility irregularities
- Increased incidence of certain cancers.

Sensitivity to patient needs

A major part of improving care for obese patients is making sure the staff is attuned to their emotional needs, advises Rona Scott, program coordinator for bariatric surgery at Medical Center East, Birmingham, Ala, who has had bariatric surgery herself.

“You don’t want patients to have to check their dignity at the door,” she says.

Clinicians need to guard against bias. A recent report from Yale showed health professionals in a survey had a strong pro-thin, anti-fat bias. Respondents also assigned stereotypes of “lazy,” “stupid,” and “worthless” to the obese.

At Medical Center East, employees who care for bariatric surgery patients must attend a 1-hour class that covers issues such as stereotypes about the overweight. The hospital also is adding a second day to its orientation that will include obesity sensitivity for all employees, including the medical staff.

“You don’t want to leave anyone out of this training,” Scott advises. A cafeteria worker’s comment can be just as hurtful as one by a nurse or physician.

Developing sensitivity is not a one-time check-off but has to be ongoing, Scott adds.

The hospital provides additional “blue-ribbon” training for nurses who specialize in care of bariatric patients. The nurses receive continuing education units and wear blue enamel pins. When obese patients need special care, perhaps with personal hygiene, they know to request a nurse with a blue ribbon.

Scott has a few suggestions for comments to avoid:

“Probably the most hurtful thing you can do is to question a person’s obesity or offer unsolicited advice,” she says.

One patient came to her in tears after a hospital volunteer asked, “Why are you so fat? Is it because you can’t lose weight, or you won’t?” The volunteer was counseled.

Another comment to steer away from—“you have such a pretty face.” What the patient hears is, “The rest of me must be ugly,” Scott notes.

Fear of how they will be treated often keeps obese patients away from the doctor, and they may not be seen until they are quite ill, says Susan Gallagher, RN, PhD, CWOCN, a wound and ostomy nurse who specializes in clinical and ethical aspects of caring for obese patients.

“Patients tell me one reason they hesitate to go to the doctor is that they don’t want to be weighed,” she says. “If we can learn to accommodate and accept them, they might come in a more timely manner, which would in turn lead to shorter stays.”

Simple actions by nurses and other staff members can make a difference, Gallagher notes.

“A lot of it has to do with how you relate to patients—do you touch them and make eye contact? These patients often feel untouchable and unlovable. So touch and eye contact are especially important.”
Obesity and the ADA

Health care providers are considered “public accommodations” under the Americans with Disabilities Act (ADA) and are required to provide “reasonable accommodation” for people with disabilities. That includes patients who are obese.

The ADA defines a disability as “a physical or mental impairment that substantially limits one or more of the major life activities of [an] individual.”

“Under the ADA, you need to provide the same necessary medical care to a disabled patient that you would for patients who are not impaired,” says Brenda Premo of the Center for Disability Issues and the Health Professions at Western University in Pomona, Calif (www.cdihp.org).

For example, if you need to weigh all patients to determine medication dosages, you would need to provide accessible scales.

Two key concepts in the ADA are “reasonableness” and “undue hardship.” A provider is expected to do what is reasonable, which would not include, for example, rebuilding a building. The law also has an exception for “undue hardship”; that is, a provider would not be required to provide an accommodation that would cause it to go out of business. Thus, a rural 30-bed hospital with a $35 million budget might find buying $8 million in equipment for obese patients would be a budget breaker, but buying a $100,000 item would not.

What about multimillion-dollar imaging equipment, such as MRI units, that aren’t accessible?

The important thing is to have a plan for the future when new equipment is bought.

“We do recommend that as you change over, you get accessible equipment. That’s not only for the obese but also for people in wheelchairs, the elderly, those who are short, and so forth,” Premo says.

Rental programs enable most hospitals to obtain some bariatric equipment on short notice, within 2 to 24 hours.

Obesity surgery patients rate hospitals

Want to find out how hospitals in your state rate with patients who have had bariatric surgery?

Go to ObesityHelp.com. Look on the left-hand menu under Information and Resources, then Hospital Directory. Selecting that will bring up a state map you can click to get a list of hospitals in your state that perform bariatric surgery.

Then click on the name of the hospital and read patient reviews on aspects of care such as Oversized Sensitive, Oversized Equipment, Quiet, Privacy, Pain Medication, Staff Responsiveness, and Overall Value.

The site managers caution readers that the reviews are subjective and do not represent a scientific sample.