Providing safe care for obese patients in the ASC

Patients are getting heavier, and outpatients are no exception. The Centers for Disease Control and Prevention (CDC) classifies nearly one-third of Americans as obese. Meanwhile, the number of procedures deemed suitable for ambulatory surgery centers (ASCs) is increasing.

That is not a problem if patients are properly screened, experts agree, but ASCs should be aware that excess weight presents a wide range of risk factors.

“Obesity has always been a challenge, but we’re becoming more sensitive to the needs of that population,” Valerie Geyer, BSN, RN, NEA-BC, explains. “It’s getting more attention.” Geyer is director of clinical services at Regional Gastroenterology Associates of Lancaster (Pennsylvania) (RGAL). RGAL’s 15 physicians perform 8,500 procedures a year in the 2 ASC facilities, primarily screening colonoscopies, upper endoscopies, and hemorrhoid treatments.

In those specialties, RGAL sees many obese patients, but they must be generally healthy to qualify for outpatient treatment. That means anesthesia physical status of 3 or lower, as defined by the American Society of Anesthesiologists, and a body mass index (BMI) of 50 or less.

**Health effects of obesity**

RGAL works with Nova Anesthesia Professionals in Villanova, Pennsylvania. According to managing partner Meena S. Desai, MD, the problem is not a patient’s weight per se but the comorbidities that tend to result. Obstructive sleep apnea is a common one.

Others include:

- systemic hypertension
- coronary artery disease
- asthma
- stroke
- renal dysfunction
- diabetes
- deep vein thrombosis.

In addition, Dr Desai notes, obese patients may be taking a variety of prescription medications or diet aids, which anesthesia providers need to take into account. Except for some modification of diabetes therapy, she recommends having patients take those medications until the day of surgery.

**Assess the risks**

In a presentation to the annual conference of the Ambulatory Surgery Center Association in May 2011, Dr Desai cautioned ASCs to not dismiss obese patients without assessing the risks.

“Because weight alone may not influence postoperative complications or unplanned admissions,” she told them, “it should not be considered the sole patient selection criterion for ambulatory surgery.”

In fact, she notes, the BMI limit for ambulatory surgery has gradually increased. There is little scientific research assessing the risks of outpatient treatment to the
obese population, however.

“Overall,” she says, “the suitability for ambulatory surgery should depend upon the severity of comorbidities and ability to optimally control the preexisting conditions as well as the type of anesthetic and type and invasiveness of the surgical procedure.”

One study that assessed the effects of ambulatory surgery on obese patients looked at the use of regional blocks on this population. In 2005, researchers Nielsen et al analyzed results for about 9,000 patients treated at Duke University Ambulatory Surgery Center in Durham, North Carolina. Block failure and complications were more common in obese patients, they found. However, they also noted that general anesthesia has its own risks of managing difficult airways and cardiopulmonary dysfunction, while sedation can depress respiratory function.

“Therefore,” they concluded, “overweight and obese patients should not be excluded from regional anesthesia procedures in the ambulatory setting.”

Assume sleep apnea

Sleep apnea increases sensitivity to sedatives, which can lead to upper airway collapse. Both midazolam and propofol may cause upper airway obstruction, but Desai notes recovery from propofol is more rapid.

Sometimes obese patients who previously showed no signs of sleep apnea develop airway obstruction during sedation. Therefore, Dr Desai recommends treating all obese patients as potentially having sleep apnea.

It is essential to monitor ventilation, she says, and often is useful to administer continuous positive airway pressure (CPAP) during moderate sedation. For patients already diagnosed with sleep apnea, general anesthesia may be preferable, Dr Desai says.

Postoperatively, she warns of complications such as airway obstruction, oxygen desaturation, systemic hypertension, cardiac arrhythmia, and the need for reintubation. She recommends keeping such patients in a semi-upright position in the postanesthesia care unit (PACU).

During recovery at home, she has found that despite the risk of oxygen desaturation in apnea patients, continued CPAP protects against further complications.

Still, she warns, “The risk of respiratory complications may last for several days after surgery because postoperative surgical stress response, anxiety, pain, and opioid use cause sleep deprivation and fragmentation, which may reduce REM sleep and exacerbate sleep disorders.” It is important, she adds, that home caregivers be informed about how to recognize and treat complications.

Setting limits

At RGAL, the patient BMI limit is 50, and the center’s equipment has a capacity limit of 350 pounds. Patients arrive from 2 sources: staff physician referrals and open access, where outside physicians or patients themselves call to arrange colonoscopies.

Patients unsure of their weight are asked to come in to have their weight checked. Meanwhile, a 13-point telephone screening identifies any conditions that could make them ineligible, such as uncontrolled diabetes, stroke, kidney failure, and heart conditions.

In addition, screeners ask patients if they use a CPAP machine or have symptoms of sleep apnea, such as snoring or constant tiredness.

Properly screened, obese patients can have a satisfactory ambulatory surgery experience.

The key is to understand and meet the needs of this population.
“You always need to treat patients as individuals,” Geyer says. “You need to be sensitive to little things; we have larger gowns and larger sheets.”

Patients need to be educated about the procedure they are about to have and the higher risks associated with their weight-related conditions.

“Make them comfortable,” Geyer advises, “and understand the cause of their anxiety.”

Finally, even though ASC patients are ambulatory, Dr Desai notes that additional help may be needed to assist and position them. “Centers should be ready for this, so as not to have nursing and ancillary staff injuries,” she advises.

—Paula DeJohn

Reference