Morbidly obese patients were once considered unsuitable for ambulatory surgery because of complicating conditions such as diabetes, hypertension, coronary artery disease, chronic obstructive airway disease, and sleep apnea.

But with improved anesthetic and surgical techniques, ambulatory surgery centers (ASC) are treating more patients with multiple medical problems, including those who are obese.

A survey in the United Kingdom published in 2002 found 85% of day surgery units were giving anesthesia to obese patients (BMI > 30). A review of 258 morbidly obese patients (BMI > 35) who had day surgery did not find a significant increase in unplanned hospital admissions or postoperative complications.

OR Manager asked an expert in ambulatory anesthesia and surgery center managers to comment on how they make decisions about care of obese patients in their facilities.

Whether obese patients should have surgery in an ambulatory setting can be site specific, comments Beverly Philip, MD, chairman of the American Society of Anesthesiologist’s committee on ambulatory surgical care.

The issues to consider are the availability of the appropriate equipment as well as personnel expertise and backup. A surgeon’s office may be less suitable than an ASC or hospital unit.

Anesthesia care

Because obese patients are at greater risk for a variety of comorbidities, they need a thorough screening before anesthesia, notes Dr Philip, who is also professor of anesthesia at Harvard Medical School and director of the day surgery unit at Brigham and Women’s Hospital, Boston.

Not only are obese patients more difficult to intubate, but their care also is harder to manage when there is an intubation problem.

“It is much more difficult to manage their airways and keep them breathing by other techniques while you find alternative ways to put the endotracheal tube in,” she says. Another difficulty in intubation is caused by the fact that obese patients can’t lie flat.

“They can’t breathe with the weight on their chests, so it may be helpful to begin anesthesia with the patient partly sitting up,” she says.

Preoperative planning

The patient appropriateness policy for Morton Plant Health Services, a Clearwater, Fla-based system, says morbidly obese patients generally are considered inappropriate candidates for its ambulatory surgery center.

Sometimes patients who have a significant weight problem are discovered by the RN performing the preoperative phone call, and the anesthesiologist is notified. The surgeon may not always inform the center about patients’ weight, notes Nancy Burden, RN, MS, Morton Plant’s director of health services.

Because patients with significant obesity may have sleep apnea and airway problems, anesthesiologists may require patients scheduled for surgery in the ASC to come to the facility for a preoperative assessment rather than having a phone assessment, which is the usual practice. The assessment determines if they are appropriate candidates for surgery in the ASC setting.

At The SurgiCenter of Baltimore, obese patients must come in for preoperative assessments by an anesthesiologist to check for airway problems or any other comorbidities that might preclude them from having surgery in the ASC, notes
Jerry Henderson, RN, BS, CNOR, CASC, executive director of the facility, located in Owings Mills, Md.

Because these patients are thoroughly screened preoperatively, most have uneventful recoveries. The SurgiCenter has not seen an increase in hospital admissions with these patients, she says. The center cares for at least one patient a month weighing about 350 lb.

The Harmony Ambulatory Surgery Center, LLC, in Fort Collins, Colo, is unusual in that it actually performs gastric bypass weight-loss surgery in its center. The surgery is feasible in that setting because, under Colorado regulations, surgery centers are allowed to keep patients for extended stays. The center, a joint venture between Poudre Valley Hospital and local physicians, is in the same building as a general surgery practice that performs a high volume of bariatric surgery. The program has had successful outcomes and is closely monitored by the center’s Medical Quality Assurance Committee. (See August 2002 OR Manager.)

Harmony discussed weight limits at length before starting the program, says Rebecca Craig, RN, CNOR, CASC, the center’s administrator. The center draws the line at 500 lb for patients who meet the BMI criteria. If a patient’s BMI is more than 50 or a patient has comorbidities, such as sleep apnea or a preoperative pulse oximetry reading of less than 90, the medical director must review the patient’s suitability for surgery at the center. Obese patients must have a preoperative electrocardiogram and lab tests, which patients of normal weight usually do not require.

**Equipment limitations**

How much weight equipment, such as OR tables and patient beds, will accommodate is a factor ASCs must consider.

“Our patient weight limit is our table weight limit,” says Henderson. The center has one OR table that will hold patients up to 400 lb, while its other surgical tables hold 350 lb. The center does not plan to buy more heavy-duty tables now, but as tables wear out, it will replace them with tables that can accommodate heavier patients.

Harmony, because of its bariatric surgery program, has equipment with higher weight limits. It has OR tables, stretchers, recovery beds, and other equipment such as wheelchairs and walkers with weight limits of 500 lb.

**Preparing for a heavier future**

Anesthesiology programs are beginning to teach students how to mask or intubate obese patients. As a professor of anesthesiology, Dr Philip says she knows her students will need to be able to help these patients and perhaps save their lives. The time to develop that skill is in a controlled situation and practice. That is increasingly necessary as the percentage of obese patients in the population steadily increases.

—Judith M. Mathias, RN, MA

**References**
