Our waiting room provides evidence each day that obesity continues to be a major problem, if not an epidemic, within the United States. It is particularly challenging in the world of arthroplasty. As reported by the Centers for Disease Control and Prevention in 2013, the obesity rate is approximately 35% and has plateaued at this level for several years. Unfortunately, the percentage of obese patients within the population of patients who seek joint replacement seems to be on the rise. In 2007, Fehring et al reported that the percentage of patients undergoing total joint replacement classified as obese nearly doubled between 1990 and 2005, from 30% to 52%.

Professional organizations including the American Association of Hip and Knee Surgeons have put together work groups with the sole objective to evaluate the current evidence-based literature and reach a consensus on risk stratification based on patient body mass index (BMI) and other risk factors. Currently, they support a BMI of less than 40 kg/m² for primary joint replacement. Many say that we have both an ethical and an expected duty to provide care for patients regardless of their BMI, reciting the oath we each accepted with our medical school training. However, we argue that elective total joint surgery for a morbidly obese patient with a BMI of greater than 40 kg/m² may actually place the physician at risk of violating some core principles of that very oath. The 4 core principles of nonmaleficence, autonomy, beneficence, and justice each play a role in how we must ultimately make decisions for these patients. Often, the interplay of these 4 principles is not black and white and requires physicians to assess much more than their ability to perform the procedure.

Many technical challenges of surgery present themselves when performing hip or knee replacement for morbidly obese patients. The sheer size of the extremity often limits visualization of the surgical field and may compromise the dexterity of the surgeon and/or the assistant. When the posterior approach to the hip is used, the operating room assistant is often saddled with the task of supporting and manipulating a very large extremity. Given the length of the surgery, which is increased because of the size of the patient, and the difficulty that positioning and exposure can present, significant fatigue and/or injury can become a risk for all parties involved. Our profession is already physically demanding and at times may place surgeons and staff in potentially dangerous positions. When a morbidly obese patient enters the operating room, the risk is heightened. Moving a 400-lb patient onto an operating table is physically demanding and carries risk for all involved. Appropriate positioning of these patients is often difficult. Additionally, morbidly obese patients have a higher likelihood of positional changes during the course of surgery, which can result in inadvertent malpositioning of the components.

Nonmaleficence is generally described as an obligation not to inflict harm on one’s patient. In many ways, as just described, patients’ own body habitus places them in a surgical environment where they are at higher risk of complications. Failure to perform a technically sound operation has been shown to in-
crease the risk of revision due to mechanical failures, particularly in total knee arthroplasty. Järvenpää et al. reported a significantly higher number of technical errors in a group of obese patients who underwent total knee arthroplasty than in a group of nonobese patients who underwent total knee arthroplasty, noting 17 technical errors in 52 obese patients compared with 5 errors in 48 nonobese patients.

Autonomy is perhaps best described by patients’ ability to provide informed consent for surgery. In the past few years, some payor entities have actually instituted restrictions based on BMI and have declined to pay for surgeries performed for patients who fall outside of these parameters. This is alarming because it completely eliminates patient autonomy and the decision-making process. This is most likely not the answer if we wish to keep patients and surgeons involved in this decision-making process. A thorough discussion of the elevated risks associated with surgery for morbidly obese patients is often enough to persuade these patients that joint replacement is not in their immediate best interest. Obese patients undergoing total knee arthroplasty have an increased risk of perioperative medical complications, including poor wound healing, infection, respiratory complications, and venous thromboembolism. Morbid obesity has independent risk factors that these individuals are subject to with each passing day, and many of these risk factors are exacerbated when coupled with a major operation such as total joint replacement. By directly explaining to patients that, as physicians, our first duty is to do no harm and that there is a real possibility of our making their conditions worse with potential complications such as stroke, heart attack, implant failure, revision, infection, or even death, we can develop a new level of physician–patient trust and reassure patients that we have their best interests in mind. Autonomy is important for our patients, but so is their ability to understand the magnitude of risk when making decisions. We understand these risks far better than our patients do because we deal with them daily. Although autonomy must be respected, we must serve as stewards to help guide patients in making intelligent decisions based on their circumstances.

The principle of intervening to benefit the well-being of patients, or beneficence, is often cited as why we must provide arthroplasty to morbidly obese patients with severe arthritis. It makes sense because we are obligated to provide the best care for our patients, but the issue becomes more complicated as we try to define what level of care to provide. Conservative measures for treating symptoms are easy but, depending on the severity of the symptoms, may be inadequate in terms of pain relief and function. The difficulty that we face today is determining at what point arthroplasty is the appropriate care. We can provide care to patients that does not involve surgery. We have an obligation to treat the whole patient and not just a specific extremity. It is our duty to optimize modifiable risk factors for each patient, especially when the risks of surgery out-weigh the benefits. Now, more than ever, our job involves connecting the nonoptimized patient with the appropriate resources for weight management, blood sugar control, low-impact exercise, and nutritional guidance. This excellent type of “caring” allows us to establish relationships with these patients. Although not directly acting on patients’ knees or hips, we are helping them move in the right direction to improve their overall health.

With appropriate concern and empathy, we can reassure patients that this plan of care is in their best interest. We must emphasize to patients that their taking control of their health is critical to the success of any intervention, whether it be weight loss or recovery from joint replacement surgery in the future. We are charged with providing care for our patients but need them to be active participants. Operative intervention will be much more successful when we work together. Weight loss in morbidly obese patients can often be used as a surrogate marker of how they may fare with rehabilitation and motivation after total joint replacement, which we know is crucial for good outcomes.

Justice can be described as an obligation to promote equal distribution of health care; however, in the current health care system, resources continue to be more finite and diligently distributed. One could argue that the health care dollars spent replacing morbidly obese patients’ hips or knees may be better used treating their diabetes and heart disease and funding bariatric surgery. The morbidity and mortality among these patients are more often associated with the medical problems resulting from their obesity and not necessarily the painful arthritic joint. Relieving joint pain may improve their quality of life substantially, but diabetes and cardiovascular disease may end their life prematurely. Numerous studies have shown that patients do not lose weight following joint replacement surgery and that obese patients have less functional improvement than their nonobese counterparts.

As we continue to look to provide care for every patient who enters our practice, the issue is no longer whether we can technically perform the surgery but rather whether the surgery is the right course of action for a particular patient. Obesity is a major societal problem. We have to be prepared to sometimes provide tough answers to tough questions. Is it okay to say no? In the morbidly obese population, no may often be the right answer, provided we supply these patients with the resources to optimize their condition prior to surgical intervention.

REFERENCES


