Center for Geriatric Surgery meets older patients’ special needs

When Mark Katlic, MD, MMM, FACS, descended into the basement of the hospital where he was a resident 30 years ago to satisfy his curiosity, he had no idea that what he found would set him on his career path.

Dr Katlic had cared for a few surgical patients more than 100 years old who had done well postoperatively, prompting him to wonder about the outcomes of other centenarians. His trip to the medical records department led him to 6 patients in that age group, all of whom had positive surgical outcomes. In 1985, he published a report in the Journal of the American Medical Association that led to the first of his 5 books on geriatric surgery.

“That one little spark of curiosity changed my career,” he says.

Dr Katlic’s latest effort is the Sinai Center for Geriatric Surgery, a virtual center based in Sinai Hospital and Levindale Hebrew Geriatric Center and Hospital in Baltimore. He serves as chief of surgery and director of the center, which provides an extensive preoperative evaluation of patients 75 years or older who are undergoing elective surgery.

Since the center “opened” in September 2012, 350 patients have been evaluated. “We’re hoping to double or even triple that in the next year,” Dr Katlic says.

Putting evidence into practice

“We’re applying the best evidence for optimal evaluation of the geriatric patient,” Dr Katlic says, referring to the “Optimal Preoperative Assessment of the Geriatric Surgical Patient” best practice guidelines from the American College of Surgeons (ACS) and the American Geriatrics Society (AGS). The guidelines state that it’s not enough to complete the typical preoperative evaluation in geriatric patients. Clinicians need to check for factors such as frailty, cognitive decline, and hearing loss that can affect a patient’s recovery (sidebar).

JoAnn Coleman, DNP, ACNP, AOCN, clinical program coordinator for the Center for Geriatric Surgery, performs the assessments. Her patients come from 3 sources: patients who are coming in for preoperative laboratory tests, nurse practitioners who are conducting the anesthesia history and physical, and referrals from surgeons. Dr Katlic adds that they have worked with scheduling staff in surgeons’ offices to encourage more referrals. “We don’t catch everyone who is 75 or older, but we’re making good progress,” he says.

In addition to the assessments recommended by ACS and AGS, Coleman assesses oral health and pinch grip strength. “Fifty percent of the patients I see are joint replacements, so it’s important to know a patient’s oral health,” she says. Medicare doesn’t pay for prophylactic dental care, so often patients neglect their teeth and are at risk for postoperative infection. The pinch grip strength is a neurological test particularly valuable for patients undergoing ophthalmologic surgery. “They have to be able to pinch the eye drop bottles, and many can’t do that,” she says.

Coleman also asks patients 3 questions: What are you having done? What have you been told to expect after surgery? Do you want to have the surgery?

Caregivers participate by completing the Zarit Caregiver Burden Interview questionnaire to assess how they will handle the stress of caring for the person after sur-
No one has ever really addressed if the burden on the caregiver is made better or worse by a big operation,” Dr Katlic says. “The idea is that it will make patients more functional and have less pain, so it should lessen the burden, but this needs to be proven.” The plan is to have caregivers complete the questionnaire again 6 months after the patient’s surgery.

Findings from patient assessments are building what Dr Katlic calls “the most comprehensive database for geriatric surgical patients.” Ultimately, the information can be analyzed to determine which preoperative tests are of most value for older patients.

**Communicating patient needs**

“The assessment results are in the electronic medical record for all to see,” Coleman says. For example, if nurses in the OR notice that a patient is hard of hearing in 1 ear, they can approach the patient from the other side. The certified registered nurse anesthetist or anesthesiologist can take into account a patient’s risk for postoperative delirium. Coleman is also working with the information technology department to create electronic “flags” for key alerts.

Nurses caring for patients after surgery particularly benefit from accessing assessment results. “Nurses don’t know what patients were like before surgery,” Coleman says. Her report enables them to compare a patient’s current status with a baseline.

Coleman notifies appropriate staff or the surgeon of key findings. For example, if someone is frail and has failing cognition, she alerts social services because the patient might need to go to a rehabilitation center instead of home after surgery. If patients are at risk for falls, staff can take extra precautions. And if patients have impaired cognition, staff can take steps to reduce the chances of delirium by using nonpharmacologic strategies, treating pain appropriately, allowing families to stay with the patient, and keeping the room quiet.

**Producing benefits**

The additional testing adds about 15 to 25 minutes to the patient assessment. Dr Katlic says the largest cost in starting the program was hiring Coleman to perform the assessments and help with research efforts.

“Not every hospital has to hire an NP [nurse practitioner],” he adds. “The tests can be done by a nurse or medical resident taught to do them.” Some of the tests could be conducted in the surgeon’s office, and some hospitals may choose to do selected tests as opposed to the comprehensive list.

Benefits to the hospital include attracting older patients who want to participate.

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**Preoperative assessment of the geriatric patient**

In addition to a history and physical exam, the American College of Surgeons and the American Geriatrics Society recommend the following assessments:

- **Assess** the patient’s cognitive ability and capacity to understand the anticipated surgery.
- **Screen** the patient for depression.
- **Identify** the patient’s risk factors for developing postoperative delirium.
- **Screen** for alcohol and other substance abuse/dependence.
- **Perform** a preoperative cardiac evaluation according to the American College of Cardiology/American Heart Association algorithm for patients undergoing noncardiac surgery.
- **Identify** the patient’s risk factors for postoperative pulmonary complications, and implement appropriate strategies for prevention.
- **Document** functional status and history of falls.
- **Determine** baseline frailty score.
- **Assess** the patient’s nutritional status and consider preoperative interventions if the patient is at severe nutritional risk.
- **Take** an accurate and detailed medication history and consider appropriate perioperative adjustments. Monitor for polypharmacy.
- **Determine** the patient’s treatment goals and expectations in the context of the possible treatment outcomes.
- **Determine** the patient’s family and social support system.
- **Order** appropriate preoperative diagnostic tests focused on elderly patients.

in a program like the one in Baltimore. Dr Katlic says he anticipates the preoperative evaluations will reduce length of stay and complications, but more data are needed to prove that.

**Improving decision-making**

Conducting a robust preoperative assessment helps in deciding what Dr Katlic calls “just right” care—matching surgery (or not performing surgery) with the patient’s condition and desires. “For most patients, quality of life is more important than quantity of life,” he says. “In some cases, a smaller surgery might be better.” For instance, in a frail patient, Dr Katlic, who is a thoracic surgeon, might choose to perform a video-assisted thoracoscopy instead of an open thoracotomy.

Making sound decisions for geriatric surgical patients will become increasingly important; Coleman says the fastest growing population segment is those 85 and older. Currently, 25% of all procedures are performed in patients over 65, and that will only continue to grow: Dr Katlic says 7,000 to 8,000 baby boomers in the US turn 65 every day.

When considering surgical interventions, he points out, “People are living longer and maintaining their health longer. We don’t want to deny care just because of age.” But, he acknowledges, “Elderly surgical patients tend to be high cost. They are at more risk for complications, and they’re in the hospital longer.”

He understands that “there might have to be some type of rationing because we can’t hide the fact that there are limited healthcare dollars,” but adds, “I don’t think it would be appropriate to set an age limit (for surgery) because function varies by age. Some 80-year-olds can play vigorous tennis, and others can’t walk to the mailbox.”

Dr Katlic has operated on many patients in their 90s and patients as old as 104. The patients’ conditions and wishes are all factored into deciding whether to perform surgery and how invasive the surgery will be. One woman over 100, who lived independently with a caregiver and played bridge every week, underwent a video-assisted thoracoscopy to allow her to breathe more easily. Her preoperative condition made the decision to perform surgery easy. In other cases the decision might be more difficult, and Dr Katlic says that an ethics committee could play a role in these situations.

“Unfortunately, we pay for a lot of care in the late stage of life when patients can’t enjoy life,” Dr Katlic says. “We need to be rational about it, but there is noth-
ing wrong in society saying we respect our elders and we want to provide good care for them.”

**Viewing the future**

“We’re going to see more and more surgery in older patients,” says Dr Katlic. “If there is anything we can do even a little better—shorten length of stay, or prevent complications—we can make a huge impact.”

—Cynthia Saver, MS, RN

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