Laparoscopic GI Surgery Safe for Octogenarians

BY MICHELE SULLIVAN

FROM THE ANNUAL MEETING OF THE SOCIETY OF AMERICAN GASTROINTESTINAL AND ENDOSCOPIC SURGEONS

NATIONAL HARBOR, MD. — Advanced age need not be an impediment to laparoscopic surgery for colon resection or paraesophageal hernia.

Two retrospective studies found that octogenarians not only tolerated laparoscopic surgery, but came through both colorectal surgery and paraesophageal hernia repair with excellent outcomes.

A shortened hospital stay is one of the biggest benefits the elderly can reap from a laparoscopic procedure, said Dr. Steven Wexner, chair of the colorectal surgery department at the Cleveland Clinic, Weston, Fla.

"Leaving the hospital sooner is beneficial to older patients because it lessens their chances of a hospital-acquired infection, fall, or psychological changes," said Dr. Wexner, lead author on one of the studies. "Unless there is a specific contraindication, these older patients [who need colorectal surgery] should be offered a laparoscopic procedure."

Dr. Wexner and his colleague, Dr. Rodrigo Pinto, examined outcomes in 83 laparoscopic and 116 open colorectal resections among a group of 199 octogenarians. The patients' mean age was 84 years, and their mean American Society of Anesthesiologists class was 2.7. Cancer was the most common diagnosis, occurring in 86% of the open surgery group and 89% of the laparoscopic surgery group. Diverticular disease was present in 9% of the open group and 8% of the laparoscopic group. The remainder of the patients had other disorders.

The patients underwent a variety of surgical procedures including right, sigmoid, and transverse colectomy; sigmoid colectomy; low anterior resection; abdomino-perineal resection; left hemicolectomy; and proctacolectomy. Stomas were constructed in 47% of the open group and 10% of the laparoscopic group.

The mean operative time was not significantly different between the groups. However, the laparoscopic group lost significantly less blood than the open group (mean 100 vs. 200 mL), required significantly fewer intraoperative transfusions (3 vs. 19), and had a significantly shorter incision length (mean 9 vs. 23 cm).

The overall rate of major surgical complications was 5% in each group. Three patients in each group required reoperation. The rate of medical complications was lower—but not significantly lower—in the laparoscopic group, compared with the open group (25% vs. 39%). There was no significant difference in mortality.

The overall morbidity rate was 49% for open surgery and 30% for laparoscopic surgery, a significant difference. Patients who underwent laparoscopic surgery left the hospital a mean of 2 days earlier than did open surgery patients (6 vs. 8 days).

The open conversion rate was 25% (21 cases). The converted cases had a longer mean operative time than those completed laparoscopically (197 vs. 156 minutes), greater mean blood loss (220 vs. 129 mL), more surgical complications (96% vs. 5%), and more postsurgical medical complications (79% vs. 21%). All the differences were significant. Overall, however, "laparoscopic colorectal resection was very safe and effective for these patients," Dr. Wexner said.

Dr. Heidi Fitzgerald of Dartmouth-Hitchcock Medical Center, Lebanon, N.H., reported on a series of 59 elderly patients (aged 80 or older) who underwent paraesophageal hernia repair. Based on her findings of a low mortality rate (two patients) and an 86% rate of symptom resolution, she and her colleagues recommended elective laparoscopic repair for octogenarians rather than watchful waiting.

The decision to repair electively or not is a controversial one, Dr. Fitzgerald said. "The major concern with paraesophageal hernias is their 10%-30% risk of complications, including hemorrhage, volvulus, strangulation, and perforation," she said. Mortality rates in untreated patients undergoing emergent surgery have ranged from 5.4% to 26% in various studies. The only study to examine the issue in the very elderly found a 16% mortality rate associated with emergent repair, compared with a 2.5% rate in elective repair in patients 80 years and older.

The mean age of Dr. Fitzgerald's patients was 86 years, and 76% were women. All repairs were completed laparoscopically.

The mean operating time was 193 minutes. Five intraoperative complications occurred. They included three pneumothoraces, which were treated in the recovery unit with needle decompression, an esophageal perforation that was recognized and repaired intraoperatively, and an esophageal perforation that was noted on postoperative day 2 and required a reoperation.

Major complications occurred in 21 patients (36%) over the 30-day postoperative period. They included two cardiac arrhythmias; four cases of dysphagia, three of which required dilation; one empyema and one aspiration pneumonia that required admission to the intensive care unit; and four cases of anemia that required transfusion.

Two patients died in the hospital after surgery. One patient had an esophageal leak that was repaired, but resulted in a fatal sepsis. One patient needed a reoperation for bleeding and subsequently developed renal and cardiac failure; the family elected to withdraw life support.

Dr. Fitzgerald had complete 1-month follow-up data on 86% of the patients (51). Thirty-nine percent of the patients (23) reported complete symptom resolution, and 47% (28) reported partial resolution.

"This was a small sample size, but despite this, we feel that laparoscopic paraesophageal hernia repair can be performed safely with minimal perioperative morbidity in octogenarians. We now advocate this approach as opposed to watchful waiting in this subset of symptomatic patients." ■

VITALS

Major Finding: Octogenarians who underwent elective laparoscopic colorectal surgery had significantly lower overall morbidity than did those who underwent open surgery (30% vs. 49%) and left the hospital earlier (6 vs. 8 days). Octogenarians who had laparoscopic repair of paraesophageal hernia had an 86% rate of symptom resolution and a 36% rate of major complications over the 30-day postoperative period.

Data Source: Two retrospective series comprising 258 patients.

Disclosures: Dr. Pinto and Dr. Fitzgerald had no disclosures. Dr. Wexner disclosed relationships with numerous medical equipment companies, including some that manufacture laparoscopic surgical instruments.

Emergency Department Use High During Last Months of Life

BY DAMIAN McNAMARA

FROM THE ANNUAL MEETING OF THE AMERICAN GERIATRICS SOCIETY

ORLANDO — Almost three-quarters of people aged 65 years and older visit emergency departments in their last 6 months of life, and just more than half do so during their last month, according to a study of 3,224 seniors.

These high utilization rates suggest that emergency department (ED) clinicians should be included in initiatives to improve end-of-life care, such as hospice and better patient-provider communication, Dr. Alexander K. Smith said. "When people come to the ED … it may be an opportunity to change the trajectory of care," said Dr. Smith of the division of geriatrics at the University of California, San Francisco, and the San Francisco Veterans Affairs Medical Center.

Nursing home residents were less likely than were community-dwelling elders to visit an emergency department. During the last month of life, 41% of the former group and 54% of the latter did so, Dr. Smith said.

Use of ED services also varied considerably in the study by hospice enrollment, ethnicity, and whether the death was expected, which was ascertained through next-of-kin interviews.

Dr. Smith and his associates created a cohort of elderly decedents using data from the Health and Retirement Study, a nationally representative longitudinal survey. During that study, the eventual decedents had been interviewed every 2 years, and Dr. Smith's team focused on the last response prior to death. The study cohort of 3,224 adults included 22% who were 65-74 years old at the time of death between 1995 and 2006, 40% aged 75-85, and 38% older than 85 years at death.

Dr. Smith and his colleagues linked the survey participants' names to Medicare utilization data to find how many had visited EDs in their last months of life. They also looked at visit frequency in this group: 33% visited an ED once, 20% two times, 10% three times, 6% four times, and 5% five times or more.

'When people come to the ED … it may be an opportunity to change the trajectory of care.'

DR. SMITH

The researchers compared the figure for how many people went to EDs in their last 1 month of life, 51%, with data for an age-, gender-, and race/ethnicity–matched cohort of elders who did not die in 2006. The researchers found that only 2% of these matched elders visited the ED in a 1-month period.

One aim of the study was to determine factors associated with ED use by dying elders. For example, 3% of hospice enrollees versus 56% of seniors not enrolled in hospice care visited an ED during the last month of life.

Also, 46% of the elders for whom death was expected visited the ED in the last month of life, while 61% of those with unexpected deaths had gone to EDs in that time frame.

"We did not have data on whether or not they had a primary care physician. But we were able to look at whether they visited the doctor frequently, and it was not associated with ED visits," he said. ■

VITALS

Major Finding: Of 3,224 seniors reviewed, 74% visited hospital emergency departments during their last 6 months of life and 51% visited during their last month.

Data Source: A cohort of people aged 65 years and older from the Health and Retirement Study and Medicare utilization data.

Disclosures: Dr. Smith had no relevant financial disclosures.