Patients Do Better With Laparoscopic Colectomy

BY ERIK GOLDMAN
Contributing Writer

BARCELONA — The long-awaited 5-year survival analysis from the Clinical Outcomes of Surgical Therapy trial indicate that laparoscopic colectomy is clinically equivalent to open abdominal surgery as a treatment for colon cancer and has advantages for quality of life, Dr. Heidi Nelson said at the 14th European Cancer Conference.

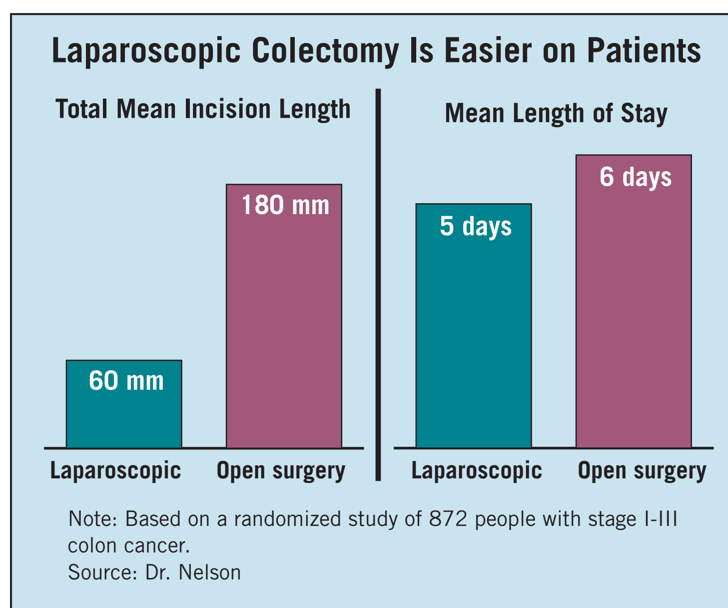
The National Cancer Institute–funded Clinical Outcomes of Surgical Therapy (COST) study began in the mid-1990s, largely in response to a 1994 statement by the American Society of Colorectal Surgeons that "absence of 5-year data makes it premature to endorse this procedure [laparoscopic colectomy]."

The numbers are now in, and "we can now say that Level 1 evidence supports the practice of laparoscopic colectomy," said Dr. Nelson, a colorectal surgeon at the Mayo Clinic, Rochester, Minn.

The trial protocol randomized 872 people with stage I-III colon cancer to either open surgery or laparoscopic colectomy, performed by well-credentialed laparoscopic surgeons at major U.S. cancer hospitals. All procedures were videotaped and archived, as were histologic samples of tumor tissue.

Initial survival data were first published in 2004, and showed no difference in clinical outcomes between the two procedures (N. Engl. J. Med. 2004;350:2050-9). However, in terms of quality of life, length of hospital stay, and pain, the scope-based procedures were clearly superior.

The 5-year survival data echo those earlier findings, Dr. Nelson said at the conference, sponsored by the Federation of European Cancer Societies. "The curves are completely overlapping. There is no significant difference in terms of overall survival or disease-free survival. The cumulative incidence of recurrence was low in both treatment arms. There is no real evidence of a clinical advantage of one procedure over the other."



After a median of 7 years' follow-up, 75% of the laparoscopic surgery patients and 77% of the open surgery patients were still alive. Disease-free survival was equal, at 69%, and local recurrence rates were very low at 2.6% in the laparoscopic group and 2.3% in the open surgery group.

Dr. Nelson noted that there seemed to be a slight statistical advantage of open procedures for overall survival of stage I patients. But this finding is difficult to interpret because most of the deaths in patients with stage I tumors were not cancer related.

The procedures were equivalent in terms of treatment-related morbidity and complication rates, which were low in both groups.

Laparoscopic colectomy had clear advantages in terms of quality of life; for example, the total mean incision lengths were 60 mm for laparoscopic surgery and 180 mm for open surgery.

Mean length of stay was 5 days for the laparoscopically treated patients vs. 6 days for open surgery patients, a 20% decrease with significant fiscal implications given the high cost of hospitalization. Laparoscopically treated patients also used fewer painkillers. ■

Nurse-Performed Colonoscopy Can Be Effective and Safe

BY ALICIA AULT
Associate Editor, Practice Trends

WASHINGTON — The increasing need for endoscopists may be partially met by training midlevel providers such as nurse-endoscopists, according to a gastroenterologist who has embarked on a training program and presented his early findings at the annual Digestive Disease Week.

Dr. Jan Koornstra, of the University Medical Center Groningen (the Netherlands), presented results of the first 100 colonoscopies performed by two nurses who completed the training. Their results were compared with those of a first-year gastroenterology fellow.

The two nurses were already part of the endoscopy team and volunteered for training. There were no special selection criteria or minimum standards for participation, Dr. Koornstra said.

Initially, the nurses were trained on a simulator. They were also given textbook instruction on the relevant theoretical background on colonoscopy. The nurses were also given Game Boy devices to help them improve hand-eye coordination at home. They then started performing two to three flexible sigmoidoscopies and colonoscopies per week.

Competence was assessed by measuring the unassisted cecal intubation rate and time. The nurses were given 30 minutes to reach the cecum. After each procedure, patients were interviewed about pain or discomfort; responses were rated on a 10-point visual analog scale. They were also asked to rate their overall satisfaction.

Dr. Koornstra and his colleagues evaluated the first 100 procedures for each nurse-endoscopist. They included only complete colonoscopies (that is, those in which the cecum could be reached) and diagnostic procedures. Therapeutic procedures and patients with previous large-bowel surgery were excluded.

The procedure results were split into four quarters. For the first 25 procedures, the cecal intubation rates were 70% for the nurses and 60% for the fellow. By the final 25 procedures, rates had improved to 96% for the nurses and 90% for the fellow.

For nurses, the mean intubation time was 14 minutes for the first 25 procedures, gradually decreasing to 12-13 minutes for the final quarter. Results were similar for the fellow, Dr. Koornstra said.

Pain decreased from a score of 3.1 on the 10-point scale to a score of 2 for the final quarter, and discomfort decreased from 1.7 to 0.2. There were virtually no differences on these measures between the nurses and the fellow, he said.

Patients were generally satisfied with the procedures. Abnormalities were identified in about half of the cases, all of which were correctly recognized by the nurses, Dr. Koornstra said.

"Although our data may be a bit premature, I believe our training program for nurse-performed colonoscopy is safe and effective," at least regarding the nurses' acquisition of technical skills and competency, he said. ■

Colorectal Neoplasms More Common in People With CAD

BY MARY ANN MOON
Contributing Writer

Colorectal neoplasms are nearly twice as common in patients newly diagnosed as having coronary artery disease than in those found not to have CAD based on coronary angiography, results of a cross-sectional study suggest.

The prevalence of colorectal neoplasms in patients with CAD in their study was nearly three times as high as that reported in the general population in either Hong Kong or the United States, investigators reported.

Dr. Annie On On Chan of the University of Hong Kong and her associates previously published a retrospective study showing a strong association between colorectal neoplasms and CAD. To further examine this link, they conducted a cross-sectional study of consecutive patients who were undergoing coronary angiography to assess suspected CAD, followed by colonoscopy.

In industrialized Hong Kong, incidence rates of colorectal cancer and CAD, and mortality from the conditions, are similar to the rates in Western countries, they noted.

The study included 206 patients who were found to have CAD, 208 patients who were found not to have CAD, and a control group of 207 people from the general Hong Kong population who were matched to the other subjects based on age and sex. The family histories of colorectal cancer were similar among the three groups.

Colonoscopy revealed that colorectal neoplasms were more prevalent in the CAD-positive group (34%) than in the CAD-negative group (18%) or the control group (20%).

This 34% prevalence in patients newly diagnosed as having CAD was especially "remarkable," compared with the current prevalences reported in the general population in Hong Kong (12%) and the United States (10%), Dr. Chan and her associates said (JAMA 2007;298:1412-9).

Similarly, the prevalences of advanced colorectal lesions and adenocarcinomas were much higher in the patients with CAD (18% and 4%, respectively) than in the patients who didn't have CAD (6% and 0.5%) or the control subjects (5% and 1%).

The reason for this association between CAD and colorectal neoplasm is not yet known, but it is possible that the two disorders share common environmental risk factors. Moreover, both disorders have been linked to metabolic syndrome and smoking, and both "probably develop through the mechanism of chronic inflammation," the investigators said. ■