Clinical Digest

ONCOLOGY

Weighing the Real Risks of Laparoscopy and Laparotomy

Treatment for endometrial cancer, laparoscopy, and laparotomy have been viewed as relatively balanced in terms of adverse events (AEs), but researchers from Duke University in Durham, North Carolina, say few studies have comprehensively compared the rate and type of events, especially complications that might be considered minor.

Comparing data from 107 women who underwent laparoscopy and 269 who had laparotomy, the researchers came up with an itemized list of 34 different event categories. Overall, there was no significant difference in the rate of AEs between the 2 groups: 33% of women in the laparoscopy group and 43% in the laparotomy group had 1 or more. There was no difference in the rate of major complications, either, with 4% of each cohort having 1 or more.

However, the researchers highlighted those AEs that were more pronounced with each treatment. For instance, women who underwent laparotomy had more moderate to severe postoperative AEs (21% vs 14%). But, while laparoscopy had a lower overall rate of adverse events, when individual complications were compared, only ileus and arrhythmia were significantly lower in the laparoscopy group.

The women in the laparoscopy group had a significantly longer mean total anesthesia (not operative) time (293 vs 154 minutes). However, they also had lower mean blood loss (124 vs 310 mL) and a shorter mean hospital stay (2.4 vs 4.5 days).

The laparotomy patients had more than double the rate of cellulitis (16% vs 7%) and open wound infection (9% vs 2%). Moreover, although the numbers were not statistically significant, the laparotomy group had 7 pulmonary emboli, 3 wound dehiscences, and 2 strokes, while the laparoscopy group had none. The laparotomy group also had 3 intraoperative injuries (1 enterotomy, 1 vascular injury, and 1 cystotomy), compared with none in the laparoscopic group.

Laparoscopy was associated with a higher rate of pelvic lymphadenectomy (79% vs 68% for laparotomy). There was no difference in the rate of aortic lymphadenectomy between the 2 cohorts. Among patients who had a lymph node dissection, there was no difference in the number of pelvic or aortic lymph nodes removed.

The laparoscopic patients were more likely to have postoperative neuropathy (5% vs 0%) and clinically significant lymphedema (7% vs 1%). After excluding patients who did not undergo lymph node dissection, the difference in rates of lymphedema and peripheral neuropathy remained statistically higher in the laparoscopy group (11% vs 1.6%, and 4.6% vs 0.5%, respectively). The researchers say it's unclear why this was the case; previous studies have suggested lymphedema rates are higher when more lymph nodes are removed during surgery. By contrast, in this study not only was the number of lymph nodes removed similar in each group, but the number of lymph nodes removed was nearly the same among patients who then experienced lymphedema and those who didn't (17.9 vs 17.8).

On the laparoscopic side, major AEs included 2 unanticipated intensive care unit admissions and 1 patient who required laparotomy for a small bowel obstruction caused by herniation through a laparoscopic trocar port site.

The researchers note that comprehensive laparoscopic surgical staging has been associated with fewer overall complications, an improved short-term quality of life, and lower costs, compared with laparotomy. However, they add, because of the higher risk of lymphedema and peripheral nerve injuries—both of which can have substantial long-term effects—it's important to study techniques to minimize those complications.

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ENDOCRINOLOGY

Treating Diabetes in the Elderly More Intensively

Diabetes is on the rise, including among the elderly—but they may not be getting effective treatment for a variety of reasons, such as concern about hypoglycemia. Despite the high rates of diabetes among the elderly, data are limited on disease management and outcomes of care for nursing home residents, say researchers from the University of Maryland in Baltimore, Omnicare Senior Health Outcomes LLC in King of Prussia, Pennsylvania, and Sanofi-aventis U.S. in Bridgewater, New Jersey. They emphasize, however, that good glycemic control in older adults, just as in younger people, can reduce microvascular and macrovascular complications and improve quality of life.

The researchers conducted a study of 2,317 residents of 23 skilled nurs-

ing facilities throughout the United States to estimate the prevalence of diabetes and examine the differences in the burden of comorbidities between elderly residents with and without diabetes.

Of the residents, 761 (32.8%) had diabetes. Alarmingly, 40.7% of the patients 84 years and younger had diabetes, compared with 24% of those 85 years and older. Nearly half of Hispanic and African American residents (45.8% and 40.3%, respectively) had diabetes, compared with 30.6% of whites. Somewhat surprisingly, more men than women had diabetes (31.8% men vs 25.1% of women).

Scores for cognition, physical functioning, and depression were comparable between the 2 groups, but residents with diabetes scored significantly higher on the Centers for Medicare and Medicaid Services Hierarchical Condition Category mode used to assign the level of burden from comorbid conditions. And at 6 and 12 months, residents with diabetes were approximately twice as likely to be hospitalized.

When the researchers looked at select comorbid conditions in medical charts, patients with diabetes were more likely to have skin conditions, cerebrovascular accident, and infection. However, interestingly, in both unadjusted and adjusted analyses they were not more likely to have renal failure at 3, 6, and 12 months. Similarly, medical chart review indicated no significant differences in rates of blindness or gangrene. A not-significant trend was seen in higher prevalence of neuropathy/peripheral neuropathy and gastroparesis.

Patients with diabetes were prescribed significantly more medications for comorbid disorders, particularly cardiovascular disease. About 47% were on angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers.

The researchers cite a study that found 1 in 4 nursing facility days were incurred by patients with diabetes. Further, they point to studies that estimated the cost for nursing home care for patients with diabetes at more than $45,000 per patient per year, and outpatient and hospital costs for patients with diabetes 4 to 5 times greater than costs for patients without diabetes. Better screening, the researchers suggest, could contribute to better management of diabetes and comorbid conditions in nursing homes, as well as lowering costs.

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