Special Barbed Suture Cuts Operative Time

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE AAGL

LAS VEGAS – Use of bidirectional barbed suture reduced operative time by approximately 40 minutes and decreased the length of hospital stay by half a day in a retrospective comparison to use of conventional smooth suture for closure in laparoscopic myomectomy.

Bidirectional barbed suture, in which barbs are cut into the suture so that they are facing in a direction opposite to that of the needle, are designed to resist migration.

The Quill bidirectional barbed suture (Angiotech Pharmaceuticals) has been commercially available in the United States since 2007.

Anecdotally, use of the barbed suture eliminates backsliding of the suture, thereby facilitating myometrial closure, said Dr. Sarah Cohen of Brigham and Women's Hospital, Boston. Dr. Cohen presented the results of the study, which were subsequently published (J. Minim. Invasive Gynecol. 2011;18:92-5).

VITALS

Major Finding: Duration of surgery was significantly shorter with the barbed suture, 117.6 vs. 161.2 minutes for the smooth suture. The length of hospital stay was also significantly reduced, 0.58 vs. 0.97 days.

Data Source: Retrospective analysis of 138 consecutive laparoscopic myomectomy cases.

Disclosures: Dr. Cohen said that the study's principal investigator, Dr. Jon I. Einarsson, is a consultant for Ethicon-Endo Surgery. The authors said they have no financial relationship with the device manufacturer, Angiotech Pharmaceuticals.

Perioperative outcomes for a total of 138 consecutive cases of laparoscopic myomectomy performed by a single surgeon were reviewed, including 31 with conventional smooth suture during February 2007 through March 2008 and 107 cases performed from March 2008 through April 2010 using bidirectional barbed suture.

Aside from the suture choice, operative technique was similar for all cases, Dr. Cohen said at the meeting.

There were no significant differences between the two patient groups in demographic characteristics.

The most common indications for undergoing laparoscopic myomectomy were pelvic pain and/or pressure (in 30 smooth and 81 barbed suture patients) and abnormal uterine bleeding (in 11 and 41). The remainder of patients underwent the procedure for other reasons.

The duration of surgery was significantly shorter with the barbed suture, 117.6 minutes compared with 161.2 minutes for the smooth suture.

The length of hospital stay was also significantly reduced, 0.58 vs. 0.97 days. The estimated blood loss, number of myomas removed, and weight of myomas did not differ between the two groups, she reported.

In order to account for any impact of a surgical learning curve, the 31 cases using smooth suture were compared with just the first 31 cases performed after the switch to bidirectional barbed suture. The duration of surgery and the hospital stay were both still significantly shorter with the barbed suture (121.9 minutes and 0.42 days).

There was one intraoperative complication in a patient with the smooth suture, which was unrelated to the suturing. There were no intraoperative complications with the barbed suture.

Postoperative complications among the barbed suture patients included two incision site infections (1.9%), four urinary tract infections (3.7%), one ileus (0.9%), and one blood transfusion (0.9%). In the smooth suture group, there were two UTIs (6.4%). The differences in complication rates were not significant, she noted. ■

Two Bowel Preps for Gyn. Laparoscopy Are Comparable in Surgeon's View

BY BRUCE JANCIN

FROM THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE

DENVER – The use of oral sodium phosphate solution for mechanical bowel preparation in gynecologic laparoscopy doesn't provide a better-quality visual field than does a single sodium phosphate enema – and patients much prefer the enema, according to randomized trial results.

On balance, the enema may be the better regimen for gynecologic laparoscopic surgeries, as it causes significantly fewer side effects. And as the study demonstrated, surgeons can't tell the difference between the oral solution and enema in terms of surgical field visualization, Dr. Linda C. Yang said.

Mechanical bowel preparation was embraced by general surgeons several decades ago in a belief that a decreased fecal load at the time of surgery would mean fewer infectious complications. However, recent published trials in colorectal surgery have not shown a significant benefit. And while mechanical bowel preparation is popular among gynecologic laparoscopic surgeons, its pros and cons in the context of this highly specialized form of surgery have not previously been well defined, observed Dr. Yang of Beth Israel Deaconess Medical Center, Boston.

VITALS

Major Finding: Surgeons rated the quality of the visual field as good or excellent 85% of the time when the oral preparation was used and, similarly, 91% of the time with the enema.

Data Source: A single-center prospective study in which 145 women undergoing gynecologic laparoscopic surgery were randomized to oral sodium phosphate solution or a sodium phosphate enema as bowel preparation.

Disclosures: Dr. Yang declared she has no relevant financial interests.

This was the impetus for her single-center prospective study in which 145 women undergoing gynecologic laparoscopic surgery were randomized to oral sodium phosphate solution or a sodium phosphate enema. Surgeons were blinded as to patient allocation assignment.

The primary study end point was the visual quality of the surgical field at the beginning and conclusion of the operation as assessed by the surgeons, who completed a detailed same-day questionnaire. They rated the quality of the visual field as good or excellent 85% of the time when the oral preparation was used and, similarly, 91% of the time with the enema. There were no significant differences between the two groups in terms of surgeons' ratings of need for additional maneuvers to enhance exposure, degree of difficulty in bowel manipulation using laparoscopic instruments, surgical difficulty, or ability to visualize the uterus, right and left adnexal structures, and posterior cul-de-sac.

The enema causes significantly fewer side effects.

DR. YANG

Surgeons were able to accurately predict which group their patients were in only 52% of the time: "Essentially, a flip of the coin," Dr. Yang noted.

Patients self-rated the severity of 12 symptoms on a visual analog scale. The oral sodium phosphate group characterized six symptoms as significantly more severe: abdominal bloating, thirst, weakness, dizziness, nausea, and fecal incontinence. Severity of the other six symptoms was not significantly different between the two groups. Two-thirds of the enema group rated their bowel preparation as easy. That was the case for 26% of those in the oral preparation group.

Ninety-seven percent of patients in the enema group said they would be willing to do the same preparation again, compared with 44% of patients in the oral preparation group. ■

Endometrial Cancer MIS Is OK in Elderly

BY MIRIAM E. TUCKER

FROM THE ANNUAL MEETING OF THE AAGL

LAS VEGAS – Minimally invasive surgical staging for endometrial cancer produced outcomes in elderly women similar to those in younger women, according to a chart review of 109 women with clinical stage I disease.

Endometrial cancer is especially prominent in elderly women, with the median age of diagnosis of 63 years; 45% of women are diagnosed at age 65 or older. Although numerous studies have shown that minimally invasive surgery (MIS) is a safe, feasible alternative to laparotomy in the management of endometrial cancer, few data are available regarding MIS approaches to endometrial cancer in the elderly population, said Dr. Melissa K. Frey of New York–Presbyterian Hospital, New York.

In this retrospective study, the 48 patients aged 65 and older had a mean age of 73 years, and the 61 in the younger group had a mean age of 56 years. There were no differences between the older and younger groups in body mass index or number of prior abdominal surgeries. However, the older group did have more major comorbidities (73% vs. 31%).

Laparoscopic procedures were used in 31 elderly patients and 36 younger women, while robotic-assisted laparoscopic procedures were used in 17 older and 25 younger patients, she reported at the meeting.

There were no significant differences in mean surgical time (239 minutes in the younger group vs. 228 in the older), estimated blood loss (187 vs. 159 mL), blood transfusions (2 vs. 1 per patient), surgical complications (4 vs. 2), mean hospital stay (2.4 vs. 2.6 days), or mean number of lymph nodes removed (18 vs. 19).

"Minimally invasive staging of endometrial cancer is feasible and safe in elderly women," Dr. Frey concluded.

She stated that she had no relevant financial disclosures. ■