Aug 1995

to have surgery. At the time of surgery, a strip of tissue from the posterior wall in the midline was resected for pathologic examination. The endometrium was significantly thinner in treated patients than in controls, and thinness was not dependent on the timing of administration of the agent. In addition, there were no difference in bleeding or other side effects when depot leuprolide was given during different times of the cycle. In conclusion, preoperative depot leuprolide acetate is useful before TEMR and TSR, and the timing of its administration is not important to produce the desired effect.

Long-Term Results of Laparoscopic Treatment of Rectosigmoid Endometriosis

[1,3]C Nezhat, [1,2]F Nezhat, [1]M Vierra, [1,2]CH Nezhat, [4]E Pennington, [4]W Ambroze, [3]F Nasserbakht. [1]Department of Obstetrics and Gynecology, Stanford University School of Medicine, Stanford, CA; [2]Center for Special Pelvic Surgery, Atlanta, GA; [3]Department of Surgery, Stanford University School of Medicine, Stanford, CA; [4]Northside Hospital, Atlanta, GA.

We reviewed data for 123 women who had multipuncture operative laparoscopy for symptomatic, infiltrative rectosigmoid colon endometriosis to evaluate the efficacy of laparoscopic treatment. We used the carbon dioxide laser to excise or vaporize endometriosis, bipolar forceps for hemostasis, and suture or a stapler for repair (see Table 1).

Follow-up data (10 mo–4 yrs) were collected from postoperative visits, questionnaires, and telephone calls. We believe that endometriosis of the rectosigmoid colon can be treated adequately and safely by a surgical team with experience in laparoscopy and bowel surgery.

Management of Ovarian Cancer by Operative Laparoscopy

[1,3]C Nezhat, [1]P Amara, [1]N Teng, [1,2]F Nezhat, [1,2]CH Nezhat, [4]DS Seidman. [1]Department of Obstetrics and Gynecology, Stanford University School of Medicine, Stanford, CA; [2]Center for Special Pelvic Surgery, Atlanta, GA; [3]Department of Surgery, Stanford University School of Medicine, Stanford, CA; [4]Department of Obstetrics and Gynecology, Sheba Medical Center, Tel Hashomer, Ramat-Gan, Israel.

The safety and advantages of advanced laparoscopic management of ovarian cancer remain controversial. Eleven women (age range 24–77 yrs) underwent a total of 14 operative laparoscopies for ovarian cancer. The average hospital stay was 2 days (range 1–6 days). No major complications occurred. The surgical stages were Ia in three patients, Ic in two, IIa in one, IIb in two, IIIa in one, and IIIc in two. Six patients had initial laparoscopic staging and therapeutic debulking procedures, including numerous peritoneal cytologies and biopsies, hysterectomy, bilateral salpingo-oophorectomy, omentectomy, pelvic and paraaortic lymphadenectomy, and occasionally appendectomy. In three other women in whom staging was incomplete at laparotomy, laparoscopy was performed to complete the staging. Laparoscopic tumor debulking combined with second-look laparoscopy was performed in four patients. The women have been followed for 6 to 48 months. Our experience with these evolving applications and techniques is promising, although

Table 1.

Operative Technique	No. of Pts.	Average Hospitalization (days)	Pts. With Pain Relief (%)	Average Weeks from Operation to Pain Relief	No. (%)
Lesion shaved from colon	64	2	95	0.8	0 (0)
Bowel wall excision and suture	31	3.5	75	4.5	2 (6.4)
Segmental resection by anal or vaginal prolapse	6	4.7	83	7.0	1 (16.6)
Complete resection by anal or vaginal prolapse	18	5.5	91	6.3	2 (11.1)
Complete resection by minilaparoscopy or laparotomy assisted	4	5.4	80	13.3	0 (0)
Totals	123				5 (4.06)

supine and steep Trendelenburg positions. Using a gauged suction-irrigator probe, we measured the position of the aortic bifurcation relative to the umbilicus and the distance between them in 64 consecutive women undergoing operative laparoscopy for a variety of gynecologic indications. Patients were placed into three groups based on body mass index (see Table 1).

In seven women the left common iliac artery, instead of the aorta, was directly under the umbilicus. The left common iliac vein was close to the right common iliac artery in 12 of 35 patients. There is a wide variation in the distance between the aortic bifurcation and umbilicus, even in patients with similar body mass index. The suggested insertion angles for the Veress needle and subumbilical cannula (obese 90°, overweight 45°–90°, thin 45°) can be misleading, and a more reliable approach is necessary.

Pain Relief after Laparoscopic or Laparoscopic-Assisted Hysterectomy

[1]F Nezhat, [2]O Bess, [1,3]C Nezhat, [1]CH Nezhat. [1]Department of Obstetrics and Gynecology, Stanford University School of Medicine, Stanford, CA; [2]private practice, Los Angeles, CA; [3]Department of Surgery, Stanford University School of Medicine, Stanford, CA.

We evaluated the operative indications and postoperative tissue findings of 153 women who underwent hysterectomy. Six- to 60-month follow-up was obtained by written questionnaire or telephone interview. Of the 153 patients, 108 had dysmenorrhea or chronic pelvic pain; of these 108 women, follow-up data were obtained for 102: 95 reported pain relief greater than 50%, 4 reported partial improvement (<50%), and 3 had no improvement. Of the 45 women with no complaint of pain, 7 had adenomyosis, 3 had endometriosis, and 2 had both. Of the 102 with pain, 31 had adenomyosis, 46 had endometriosis, and 19 had both. Of those with minimal pain relief after hysterectomy, two had endometriosis and none had adenomyosis. Of women reporting no improvement, one had endometriosis and another had endometriosis and adenomyosis. Adnexa were removed all but two of the seven patients with no pain relief or minimal improvement. We conclude that in selected women with complaints of pelvic pain, improvement may be achieved by performing a hysterectomy together with careful laparoscopic treatment of pelvic endometriosis.

The Role of Laparoscopic Ovarian Biopsy in the Management of Premature Gonadal Failure

AC Olivar. Hartford Hospital, University of Connecticut Health Center, Farmington, CT.

The management of premature menopause is quite different from that of ovarian resistant syndrome with respect to fertility. No pathognomonic clinical symptoms, signs, or biochemical tests clearly differentiate the two conditions. The only way to establish the presence or absence of primordial follicles is to examine an adequate amount of ovarian tissue for histopathologic diagnosis. In the past, the only way to obtain a representative specimen was by laparotomy; however, presently it is relatively simple to do it laparoscopally. From January 1988 to December 1994, 22 women (age range 21–38 yrs) with infertility and premature gonadal failure underwent ovarian biopsies using a Wolf ovarian biopsy forceps. In five (22.7%) patients the biopsy specimens showed the presence of primordial follicles. Of these five women with ovarian resistant syndrome, two became pregnant. Women want to know their prognosis for fertility, and the only way to counsel them is to discern whether or not they have primordial follicles. The only way to determine this is to obtain tissue for diagnosis, thus avoiding unnecessary expenses and raising false hopes.

Table 1.

No.	Body Mass Index (kg/m²)	BF Not Seen (%)		BF Above UMB (%)		BF at UMB (%)		BF Below UMB (%)		Avg. Distance of BF from UMB ± SEM (cm)	
		Supine	Trend.	Supine	Trend.	Supine	Trend.	Supine	Trend.	Supine	Trend.
44	<25	0	0	68	36	9	30	23	34	0.96 ± 1.09	-0.03 ± 1.2
14	25–30	14	14	36	7	29	21	21	57	0.0 ± 1.54	-0.83 ± 0.87
6	>30	17	17	50	0	3	33	0	50	-1.0 ± 0.89	0.9 ± 0.8

Trend. = Trendelenburg position.

Trends in Scientific Publications Regarding Laparoscopy Over the Last Three Decades

[1]DS Seidman, [1]M Ashrafinia, [2]F Nasserbakht, [1]CH Nezhat, [1]F Nezhat, [2]C Nezhat. [1]Department of Obstetrics and Gynecology, [2]Department of Surgery, Stanford University School of Medicine, Stanford, CA.

We attempted to determine the extensive changes in the performance of laparoscopy that have occurred over the last 30 years. Studies containing the words "laparoscopy" and "laparoscopic" from 1966 through 1993 were identified by a MEDLINE search. The number of papers per year gradually increased, with an annual mean ± SD of 59 ± 19 (range 41–90) in 1966–1970, 235 ± 50 (range 157–279) in 1971–1975, 286 ± 34 (range 265–345) in 1976–1980, 349 ± 54 (range 266–436) in 1981–1988, 546 in 1989, 622 in 1990, 1033 in 1991, 1517 in 1992, and 2091 in 1993. The table shows the major indications for laparoscopy.

Review of published articles reveals a shift in scientific interest over the last 3 decades in the field of laparoscopy.

Laparoscopic Modified MMK Using Direct Stapling Method

MR Seitzinger. Department of Gynecology, Espanola Hospital, Espanola, NM.

With the advent of operative laparoscopy, retropubic colposuspension has undergone a number of changes in technique for supporting the urethrovesicle junction. The suturing method reported by Vancaille and Liu has the disadvantage for physicians who are not adept at the procedure. Another approach is to staple mesh to the paravaginal tissue and to Cooper's ligament; however, this does not allow direct apposition of tissue. The Seitzinger modified Marshall-Marchetti-Krantz procedure anchors the paravaginal tissue at six points: directly to the periosteum of the symphysis pubis and two more laterally to Cooper's ligament bilaterally. All patients have preoperative urinary evaluation to rule out detrussor instability and chronic infection. Genuine stress urinary incontinence is corrected by stabilizing the urethrovesicle junction. This variation of retropubic colposuspension may in time prove to be the easiest and safest to perform.

The Correlation of Intraabdominal Endometriosis to Interstitial Cystitis in the Urinary Bladder

MR Seitzinger. Department of Gynecology, Espanola Hospital, Espanola, NM.

The association of endometriosis with interstitial cystitis of the female urinary bladder is rarely mentioned in the literature. For the past 3 years, 30 women from this author's practice were diagnosed as having both of these enigmatic diseases. Some women were referred by urologists after being diagnosed with interstitial cystitis. Others were initially diagnosed and treated for endometriosis at laparoscopy. Although pelvic pain was markedly improved, persistent irritative bladder symptoms mandated their referral to a urologist who diagnosed interstitial cystitis. The last four patients with both diagnoses were treated postoperatively with injections of leuprolide acetate monthly for between 3 and 6 months. The drug was discontinued when they declared themselves to be free of symptoms. All four women underwent cystoscopy with overdistention of the bladder (Stamey test). None had glomerularizations or Hunner ulcers. This paper reviews possible etiologies of both diseases and discusses a definitive double-blind study to determine if these findings are merely coincidental or have a common link. Recurrent pain after ablative therapy should alert the physician to evaluate the urinary bladder to rule out interstitial cystitis.

The Use of Dynamic Intraoperative Urethral Pressure Profiles During Laparoscopic Colposuspension

MR Seitzinger. Department of Gynecology, Espanola Hospital, Espanola, NM.

The failure of the treatment of genuine stress urinary incontinence is between 5% and 10% with the Burch and Marshall-Marchetti-Krantz procedure methods. Reasons for the unsuccessful repair include inadequate preoperative evaluation, detrussor instability, an undiagnosed neurologic condition, and, most common, inappropriate placement of the urethrovesicle junction. The result may be undercorrection or overcorrection of the unstable urethra. A study is evaluating the effectiveness of actively monitoring urethral pressures and abdominal pressures during laparoscopic retropubic colposuspensions. If the surgeon