622

Pulliam S[1], Rardin C[2], Rosenblatt P[1]
1. Mount Auburn Hospital/Harvard Medical School, 2. Brown University School of Medicine

LAPAROSCOPIC SACROCOLPOPEXY AND ABDOMINAL SACROCOLPOPEXY: A RETROSPECTIVE COMPARISON

Hypothesis / aims of study

The option of laparoscopic surgery to repair pelvic organ prolapse (POP) appeals to many patients who wish to avoid an abdominal procedure. We present a retrospective comparison of abdominal sacrocolpopexy (ASC) and an alternative, laparoscopic sacrocolpopexy (LSC) for the treatment of vaginal vault prolapse.

Study design, materials and methods

The hospital and office records of all patients who underwent ASC and LSC by the same surgeon from March 1998 until June 2003 were reviewed. Variables collected included demographics, intraoperative data, and surgical results as evaluated by pre- and post-operative supine POP-Q measurements. Both open and laparoscopic procedures were performed using a Y-shaped Mersilene mesh (Ethicon, Somerville, NJ) graft, which was secured to the anterior and posterior endopelvic fascia using eight to ten stitches of permanent suture. The mesh was then attached to the sacral promontory at the level of S-1 using a minimum of two stitches, and was then reperitonealized. Statistics were performed using SPSS version 11.5.0 for Windows.

Results

Thirteen patients underwent ASC and 10 underwent LSC. Demographic and outcome variables are noted in tabular form, with postoperative measurements noted at 6 weeks. No intraoperative complications occurred in either group. Postoperative complications in the ASC group included 1 wound infection and 2 cases of ileus. LSC postop complications included 1 mesh erosion and 1 trochar site hernia. In the ASC group, 12/13 patients had concomitant procedures, including TAH (2), lysis of adhesions (5), abdominal paravaginal repair (5), posterior colporrhaphy (4), and TVT (4). In the LSC group, 9/10 patients had concomitant procedures, including laparoscopic paravaginal repair (6), lysis of adhesions (6), posterior colporrhaphy (3), and TVT sling (3).

Variable	N	Mean	SD	Sig
Age LSC	10	53.00	9.14	0.206
ASC	13	58.89	11.22	
BMI LSC	10	23.9	3.14	0.021
ASC	12	29.17	6.22	
EBL LSC	10	57.5	16.8	0.001
ASC	13	138.4	82.01	
OR time LSC	10	206.6	50.3	0.722
ASC	12	199.2	35.4	
Hosp Days LSC	10	1.1	.316	0.001
ASC	12	3.08	1.39	

Variable	N	Mean	SD	Sig
Preop Aa LSC	10	-0.1	1.47	0.722
ASC	12	0.333	1.91	
Preop Ap LSC	10	-1.5	1.51	0.722
ASC	12	-1.88	0.88	
Preop C LSC	10	-2.50	3.84	0.036
ASC	12	1.50	4.24	
Postop Aa LSC	10	-2.65	0.53	0.918
ASC	11	-2.68	0.51	
Postop Ap LSC	10	-2.65	0.52	0.468
ASC	11	-2.82	0.40	
Postop C LSC	10	-8.5	1.47	0.654
ASC	11	-6.5	1.74	

Interpretation of results

LSC and ASC appear to be comparable procedures in terms of operative time. Operative time for both LSC and ASC included time required for concomitant procedures; however, both groups underwent a similar number and type of concomitant procedures. LSC and ASC both resulted in similar suspension of the vaginal apex, though as a group the LSC patients had significantly higher C values preoperatively. Anterior and posterior vaginal wall suspension also yeilded similar results. Patients who underwent LSC experienced significantly less blood loss, and had a significantly shorter length of hospitalisation.

Concluding message

LSC is an alternative to traditional abdominal surgery for POP. Additional longitudinal follow up and a larger cohort of patients may clarify the frequency of complications and durability of LSC.