

LAPAROSCOPIC BURCH COLPOSUSPENSION COMPARED TO LAPAROTOMY FOR TREATMENT URINARY STRESS INCONTINENCE.

Hypothesis / aims of study

The purpose of this study was to evaluate the clinical results of a laparoscopic Burch colposuspension with those of a classic Burch colposuspension, among women with stress urinary incontinence, using urodynamic testing.

Study design, materials and methods

One hundred-eight women, between the ages of 34 and 78 with urodynamically diagnosed genuine stress incontinence, were randomized between November 2002 and October 2006 for the study. Fifty-one patients underwent a laparoscopy and fifty-seven had undergone a laparotomy. Follow-up was conducted at 18 months after the surgery. All the statistical analyses were performed with the SAS® Enterprise Guide software v 2.0.0.417. Regarding the sample size -98, the number of cases fulfils precondition. Patients with OAB, hyperactive detrusor, ISD (VLPP <65cmH₂O, MUCP <20cmH₂O), POPQ grade III and IV, with diabetes mellitus, neurological disorders and with contraindication for open procedure and for laparoscopy- were excluded from the study.

Results

Urodynamic parameters, which were estimated prior to and after the transabdominal surgery, were found to be statistically significant - Qmax (<0.0062), FS (<0.0012), VLPP and CLPP (<0.0008) and (<0.0001), respectively. Stress tests after the procedure appeared to be without urine leak and with a correct bladder pressure. Urodynamic parameters of patients who underwent laparoscopy, and were found to be statistically significant prior to and after the procedure, were as follows - Qmax (<0.0001), Pain (>0.0415), VLPP and CLPP (>0.0001) and (<0.0001), respectively. As in the case of transabdominal surgery, stress tests following laparoscopy appeared to be without urine leak and with a correct bladder pressure. Mean operating time for laparoscopy was 53.13±6.20 minutes and 38.70±6.89 minutes (p<0.0001) for laparotomy. Mean postoperative hospital stay was 37.03±9.11 hours for laparoscopic group and 63.08±15.51 hours for the open surgery group (p<0.01). Mean blood loss was 94.60±40.32 ml and 154.82±50.68 ml, respectively (p<0.001). Urine retention occurred in one case following laparoscopy, and in two cases after a transabdominal approach. Wound infection, retropubic hematoma, dyspareunia, and thrombophlebitis were associated only with laparotomy. There was no bladder perforation in any of the groups.

Interpretation of results

After a follow-up period of 18 months, the results of the two procedures were found to be comparable (1).

Concluding message

Although differences exist between the laparoscopic and transabdominal Burch with regard to operating time, blood loss and hospital stay, both procedures are comparable with regard to surgical success in treating stress incontinence (2).

References

1. BJOG 2004 Dec;111(1):49-52 <http://www.blackwell-synergy.com/loi/BJO>
2. BJOG 2006 Sep;113(9):2006; 999-1006 <http://www.blackwell-synergy.com/loi/BJO>

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	No ethical approval was needed because we took advantage of proven procedures like Burch colposuspension and urodynamic tests.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes