INITIAL OUTCOMES FOLLOWING LAPAROSCOPIC UTERINE SLING SUSPENSION: A NEW SURGICAL TECHNIQUE FOR THE TREATMENT OF PROLAPSE.

Hypothesis / aims of study

Evaluate the clinical efficacy of a new laparoscopic sling suspension technique for the treatment of uterine prolapse.

Study design, materials and methods

Women with uterine prolapse who were keen for uterine conservation were offered laparoscopic sling suspension as one of their treatment options. The procedure is registered with the National Institute of Clinical Excellence and has been approved by the hospital new procedures clinical governance committee. Patients were aware that this is a new operation consequently with no long-term follow-up data.

After laparoscopic entry into the pelvis, a tunnel is made by blunt dissection underneath the peritoneum from the sacral promontory to the insertion of the uterosacral ligament complex into the cervix on either side. A 5mm mersilene tape is placed through the cervix. The tape is then passed through the uterosacral ligaments. The tape is then passed through the peritoneal tunnel on either side and is tacked bilaterally to the sacral promontory with endosutures to elevate the uterus. The peritoneum is closed to completely cover the tape. At the end of the procedure the sling resembles newly created uterosacral ligaments.

Vaginal symptom and quality of life measures as assessed by the validated ICIQ-VS and clinical examination using the POP-Q system are recorded pre-operatively and at 3, 6 and 12 months postoperatively.

Results

To date the procedure has been performed on eight patients, with six having completed six month follow-up. The median age is 37.3 years (IQR 34.2-49.7). The median duration of the operations was 123 minutes (IQR 94-149). The median duration of in-patient stay was 2 nights (IQR 2-3.25). There have been no serious complications noted although two women failed a trial of void on the ward and needed to go home with an indwelling catheter for one week, after which they both voided satisfactorily. The changes in POP-Q parameters for the group are shown below.

Change in POP-Q measurements

3 and 6 months post op

The change in vaginal symptom score and sexual matters score are shown below.
Symptom score using the ICIQ-VS before and after surgery

Interpretation of results
Our surgical technique aims to restore normal uterine support by using mersilene tape to reinforce the uterosacral ligaments and suspend the uterus to the sacral promontory bilaterally. On clinical examination using the POP-Q system we have seen considerable reductions in both the C and D measurements following surgery. This is likely to account for the symptom improvement reported by the women using the ICIQ-VS validated symptom questionnaire, and these improvements appear to be sustained over the six month period following surgery.

Concluding message
Laparoscopic sling suspension is a promising new minimally invasive surgical technique for the minimally invasive treatment of uterine prolapse in women desirous of uterine conservation.

References

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HUMAN SUBJECTS: This study was approved by the UCH new procedures clinical governance committee and followed the Declaration of Helsinki informed consent was obtained from the patients.