

SACROSPINOUS LIGAMENT SUSPENSION TREATMENT FOR SEVERE HYSTEROCELE: A NEW TECHNIQUE "HISTEROPEXY WITHOUT MESH"

Synopsis of Video

In this video we show a new reconstructive site-specific technique, sacrospinous ligament suspension treatment for severe hysterocele, "histeropexy without mesh". The rationale of this innovative technique is the repair of the central compartment with the suspension of the uterus to the sacrospinous ligament (SSL) without removing it, due to its importance in the pelvic balance. Infact, traditional surgical techniques have a whole recurrence of the central defect.

Hypothesis / aims of study

The aim of this new technique is to obtain a first level repair, with the suspension of the uterus to the sacrospinous ligaments (SSL) by four not adsorbible sutures using endostitch device (Tyco Healthcare, USA), without prostheses.

Study design, materials and methods

We followed CONSORT criteria for the description of this trial. The study was approved by the Local Ethics committee and an informed consent was signed before recruitment.

Thertyfive patients, 18 with hysterocele 2°, 10 with 3° and 7 with 4° degree were recluted. Nineteen women presented 1°degree cistocele-rectocele and eight 2° degree cistorectocele (Figure 1).

All patients wished maintain uterus. Exclusion criteria were: previous urogynecological surgical operation, uterine disease and severe defecation problems. Endometrial cancer screening was conducted with a pelvic ultrasound and, when indicated, confirmed with an endometrial biopsy. Urinary functions were preoperatively and postoperatively investigated with urodynamic studies in all patients; those with posterior prolapses also underwent defecography [10-11]. The pelvic status was classified according to the international Pelvic Organ Prolapse staging system (POP-Q) [1].

The anterior vaginal wall was infiltrated with 0.5% lignocaine and 0.25% epinephrine. A midline vertical anterior vaginal incision was made 2 cm below the external urethral meatus, the bladder was dissected from the vagina and the paravesical spaces were reached (Figure 2). By the use of fingers we identified the tendineous arch of the pelvic fascia (ATFP), the ischiatic spine and the sacrospinous ligament (SSL). We inserted and fixed sacrospine ligament with endostitch, this represents the first level of suspension for uterus (Figure 3, 4), as described by DeLancey (2).



Figure 1

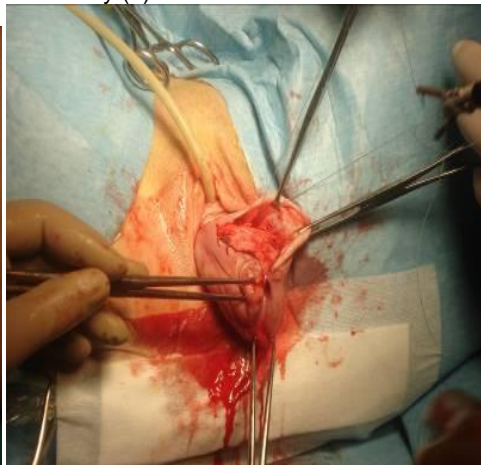


Figure 2

Sacrospine suspension performed with two anterior not adsorbible suture between pericervical ring of uterus and sacrospine ligament and with two posterior not adsorbible suture between two uterus sacral ligament and sacrospine ligament using endostitch device (Figure 2, 3)

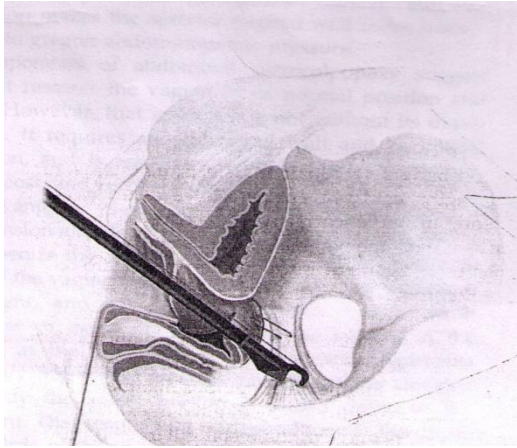


Figure 3



Figure 4

Results

We obtained repair of the pelvic organs prolapse without undergoing hysterectomy, without vaginal erosions. The 4 sacrospinous attachments could explain the absence of recurrences that we experienced so far, probably because should one detachment occur, the remaining attachments provide enough strength to support the entire pelvic floor. This procedure maintains a functional vagina and reduces the cost of the prostheses.

Interpretation of results

This pilot study suggests that our technique is safe and effective and can efficiently repair the pelvic organs prolapse without undergoing hysterectomy and without vaginal erosions and dyspareunia.

Concluding message

Our technique can efficiently repair the pelvic organs prolapse without recurrences, urinary impairments and without risk of erosions and dyspareunia. Furthermore, we reconstructed the anatomical aspect of the pelvis by using non-absorbable suture without removing the uterus and without mesh. Although we treated a small number of patients, we believe that it's worth to be applied and validated in prospective and randomized studies.

References

1. [Vierhout ME, Stoutjesdijk J, Spruijt J](#). A comparison of preoperative and intraoperative evaluation of patients undergoing pelvic reconstructive surgery for pelvic organ prolapse using the Pelvic Organ Prolapse Quantification System. [Int Urogynecol J Pelvic Floor Dysfunct](#). 2006 Jan;17(1):46-9. Epub 2005 Jul 29
2. DeLancey JOL. Standing anatomy of the pelvic floor. *J Pelv Surg*; 1996 2: 260-3.

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The rationale of this innovative technique is the repair of the central compartment with the suspension of the uterus to the sacrospinous ligament (SSL) without removing it, due to its importance in the pelvic balance. In fact, traditional surgical techniques have a whole recurrence of the central defect. The Ulmsten's "Integral Theory" for pelvic floor dysfunctions is based on the need to reinforce fascias and ligaments, to obtain a reconstitution of the pelvic floor's anatomy.

Is this a clinical trial?

No

What were the subjects in the study?

HUMAN

Was this study approved by an ethics committee?

Yes

Specify Name of Ethics Committee

The study was approved by the Local Ethics committee of Tor Vergata University, Rome.

Was the Declaration of Helsinki followed?

Yes

Was informed consent obtained from the patients?

Yes