

CLINICAL AND URODYNAMICS RESULTS IN COLPOSACROPEXY AND HYSTEROCOLPOSACROPEXY

Hypothesis / aims of study

Nowadays surgeons must take into account the wishes and feelings of the patient who wants to preserve the vaginal function and keep the uterus in situ. We prospectively compare sacropexy with and without hysterectomy in patients with uterovaginal prolapse, whose uterus could be preserved. We describe the surgical techniques and compare the efficacy and the overall results.

Study design, materials and methods

Fifty-six consecutive patients affected by grade III-IV uterovaginal prolapse underwent colposacropexy (CSP). Informed consent was obtained, the risks and the benefits of uterus preservation, the need for a long-term check-ups, pregnancy-related risks were explained. The surgeon reserved the right to perform hysterectomy if necessary or advisable.

Twenty-nine patients underwent hysterectomy followed by sacropexy (CSP) and twenty-seven underwent hysterocolposacropexy (HSP). Patients underwent a clinical urogynaecological examination, a transrectal ultrasound scan, an urodynamic test. In CSP anchorage was achieved with two synthetic meshes fixed to the anterior and posterior vaginal wall with 4-5 stitches each. The large vagina-mesh contact area reduced the risk of suspension failure. HSP was performed using 3-4 stitches to anchor 1 posterior rectangular mesh and 1 anterior Y-shaped mesh passed through broad ligament to the vagina and the uterine isthmus. In the first 8 cases we used only the posterior rectangular mesh. Follow-up ranges from 12 to 98 months (mean 48 months). Check ups were scheduled at 3, 6, 12 months and then annually.

Results

No significant differences emerged in age, parity, body mass index, incidence of previous surgery, constipation, sexual activity, menopausal status, urinary stress incontinence, degree of prolapse, voiding and irritative symptoms, length of follow-up in the HSP and CSP groups. Mean operating times were 115 minutes in CSP vs 89 minutes in HSP group ($P < 0.001$). Mean intraoperative blood loss and hospital stay are significantly less in the HSP group ($p < 0.001$). No patients required surgery for recurrent prolapse at a mean follow-up of 48 months (12-98 months) as the uterus or vaginal vault is well supported in all. HSP: 5 patients had asymptomatic grade II cystoceles due to a central defect and 4/5 had been treated with the original 1-mesh technique. CSP: 6 low-grade posterior defects were observed. Cystocele or rectocele did not require surgery in any patient. All sexually active patients except one referred marked improvements. Despite anterior colposuspension, incontinence persists in 50% of patients in both groups. SUI developed postoperatively only in 1 patient. Five patients with G1 incontinence were treated conservatively: anticholinergic drugs in the 2 with urge incontinence; physiokinesitherapy and Biofeedback in 2/3 patients with stress incontinence. 6/11 patients with G2 incontinence were treated with minimally invasive techniques (1 Adjustable continence therapy, 2 Trans Obturator tape, 2 TVT and 1 macropastique injection). All but the last had a complete resolution. Three patients are waiting for surgery; 2 have refused surgery.

Urodynamic results showed the pressure/flow parameters improved significantly ($p < 0.001$). Mean Maximum Urethral Closure Pressure (MUCP) diminished. Post-void residue in 14 patients before HSP persisted post-operatively only in one. Post-void residue in 13 patients before CSP persisted post-operatively in 1. There was 1 de novo case of detrusor overactivity in the HSP group. Pre-operative VLPP was negative in 21/27 (78%) in HSP group and in 24/29 (82%) in CSP group and it was positive in 11 patients: 10 VLPP < 60 cmH₂O and 1 > 60 cmH₂O, with the low values indicating Intrinsic sphincter deficiency. VLPP tended to remain positive despite colposuspension with only 3/11 patients continent post-operatively. Preoperative MUCP and grade of incontinence did not appear to be related to post-operative incontinence.

24/27 patients (88.9%) in the HSP group are satisfied and would repeat surgery again. Reasons for dissatisfaction: persistent incontinence (1), obstructive symptoms associated with urge incontinence (1), delayed recovery due to dysuria and self-catheterism (1). 25/29 (86.2%) in the CSP group are satisfied. The 4 patients who would not repeat surgery were all incontinent (1 resolved after TVT, 1 remained incontinent after injectable therapy and was affected by post-surgical hernia and 2 refused further surgery for incontinence).

Interpretation of results

Sacrocolpopexy with or without hysterectomy provides a secure proximal and distal anchorage without tension. Pelvic statics remain as close as possible to the physiological with normal vaginal axis and good vaginal length. Hysterocolposacropexy can be offered to women with symptomatic descensus who request uterine preservation. All who kept the uterus were very satisfied with maintenance of body integrity but had to be well informed about the long-term follow-up to prevent malignant disease of the uterus.

Concluding message

Long-term results in terms of prolapse resolution, urodynamic outcomes, improvements in voiding and sexual dysfunctions are excellent.

Post-operative incontinence was the main reason for patient dissatisfaction. It needs to be clearly discussed pre-operatively with the patient, reassuring her that it can be treated with mini-invasive techniques with excellent results.