Multiorgan female pelvic prolapse: Pelvic Organ Prolapse Suspension (P.O.P.S.) Stapled Transanal Rectale Resection (S.T.A.R.R.)



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New surgical tecniques and results

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AIM: To demonstrate the surgical treatment validity and the post-operative complication decrease. MATERIAL OF STUDY: Seventythree women who underwent P.O.P.S. + S.T.A.R.R. treatment, follow-up one year. RESULTS: We observed an important reduction or a completely disappearance about pre-operative signs and symptoms. DISCUSSION: We are aware that the proposed technique, if taken into account by urogynecologists, will raise several arguments and will raise many doubts and perplexities. For this reason we wanted develop a follow-up sufficiently long and many case studies with data to support our claims.

CONCLUSIONS: We believe that the procedure proposed by us, given the results, was excellent in patients with multiorgan pelvic prolapse, especially with the vagina walls elongated and that retain a good trophism.

KEY WORDS: Prolapse, P.O.P.S., Pluricompartimental.

Introduction

Pelvic floor disorders are a growing component of women's health care problems. Pelvic organ prolapse is a major cause of morbidity in women, affecting 30-40% of parous women and increase with age ¹. The 23.7% of U.S. community-dwelling women will have Pelvic Floor Disorders and that prevalence increases to 50% in women over 50 years old ². Symptomatic Pelvic Organ Prolapse can have an important impact on general health-related quality of life and interfere as a disability with physical mobility, pain, emotional reaction, social isolation, energy and sleep ³. Also pelvic organ prolapse disorders are associated with a profound adverse effect on

quality of life, and there is a significant correlation between impairment of total P-QoL scores and increasing stage of uterovaginal prolapse. The impact of pelvic floor disorders on health related QoL is similar to the impact of other chronic and debilitating medical condition as stroke, cancer, diabetes and dementia ⁴. Lifetime risk of undergoing at least one surgical procedure for prolapse and urinary incontinence was 11-18 % by the age of 79 years old and the reoperation rate for recurrence of these disorders was 29,2% 5. Over the next 30 years, demand for services to care for female pelvic organs disease will increase at twice the rate of growth of the same population and the number of surgeries for UI and POP will increase substantially over the next 40 years ⁶. The high prevalence of POP results in high socio-economic costs and a significant impact on quality of life of these patients. Data in literature studied again in terms of colorectal proctology bring out some important observations: there is an unacceptable percentage of ODS not resolved with conventional surgical procedures. The Impact of surgical correction of prolapse symptoms on these remains unclear. There are few studies that explore

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this issue and the data that exist are mixed. Several studies suggest an improvement in constipation levels ⁷, while others demonstrated a worsening in symptoms or a significant degree of new-onset constipation ⁸. Based on these assumptions, we employed the procedure POPS (Pelvic Organs Prolapse Suspension). In this paper we report the preliminary results.

Materials and Methods

We enrolled 73 women with symptomatic pelvic organ prolapse. The interview and some investigations were part of routine preoperative and postoperative assessments.

Standard history consisted: age, parity, Body Mass Index (BMI), menopausal status. Symptom and sign about multiorgan pelvic prolapse: ODS, fecal incontinence, rectocele, rectal prolapse, enterocele, stress urinary incontinence, urinary urgency, distance of vaginal vault to sacropubic line. We used Longo ODS score to assess obstructed defecation syndrome and Wexner score to evaluate impairment of fecal incontinence. We examinated the patient in gynecological position following the steps below: perineal examination, combined rectal and vaginal examinations at rest and under straining. We staged uterine prolapse by a speculm, using "Half way system". All patients underwent preoperative cytology of the cervix and ultrasound examination of the uterus to detect abnormalities. Urodynamic studies, including uroflowmetry, cystomanometry, pressure flow studies and residual urine volume, were reserved patients affected by urinary disorders. Rx dynamic pelvigraphy (contrasting bladder, vagina, rectum and bowel) were performed in all patients. This examination gave us the following parameters: rectocel depth, extent of rectal prolapse, the distance between the vaginal vault and sacro-pubic line, grade of cystocele, the distance from the vaginal vault to the pubis and to the sacrum; descent of the perineum at rest and under maximum strain, the distance from the most caudal point of Douglas compared to the sacro-pubic line. Follow-up is planned at 1, 3, 6, 12 months, we repeated: questionnaires regarding pelvic organ prolapse disorders; clinical evaluation; ODS and fecal incontinence scores. We repeated Cinedefecography 3 months after surgery. The study program follow all patients for at least 1 year, final data are under review and statistical analysis, however the preliminary results we believe are very interesting.

Results

The general data concerning 73 patients (Table I). We can notice that only 33 (45.20%) were in menopause. Symptoms of obstructed defecation were present in 58 patients (79.45%), while 9 (12.32%) suffered from active fecal incontinence. Using preoperative RX cinede-

TABLE	Ι
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N°= 73 Patients	Preoperatory	Postoperatory (follow-up: 1 year)
Age	48	
ODS	58 (79.45%)	6 (8.21 %)
BMI	27,1	
Menopause	33 (45,20%)	
Multiparous	68 (93,15%)	
Fecal incontinence	9 (12.32%)	0 (0.00%)
Rectocele	70 (95.89%)	7 (9.58%)
Rectal prolapse	71 (97.26%)	5 (6.84%)
Enterocele	62 (84.93%)	8 (10.95%)
Stress urinary incontinence	63 (86.30%)	3 (4.10%)
Urinary urgency	47 (64.38)	4 (5.47%)
Distance of vaginal vault		
to sacro-pubic line	4.5cm	0.3 cm
Relapses		0 (0.00%)

fecograpy we found rectocele and rectal prolapse respectively in 70 (95.89%) and in 71 (97.26%) of cases. Enterocele was detected in 62 (84.93%), but it is likely that, in some cases, the occlusion of the pelvis by the uterus impede the visibility of these alterations. We also assessed the descent of the vaginal vault to the sacropubic line, in RX pelvigraphy was 4.5 cm. The mean operative time in patients with VLS POPS without additional procedures was 85 minutes (range 50' - 95'). Blood loss during POPS steps was almost always negligible, however transfusions intra-or postoperative were never required. The most frequent surgical complications was defecation urgency in 15 patients. Follow-up is planned at 1, 3, 6, 12 months, we repeated: questionnaires regarding pelvic organ prolapse disorders; clinical evaluation; ODS and fecal incontinence scores. We repeated Cinedefecography 3 months after surgery in patients with surgical complication. There weren' cases of de novo dyspareunia, and all patients with this affliction preoperative reported cure or significant improvement. The anatomical results evaluated clinically by "Half way system" were excellent, in particular hysterocele was well corrected in 100% of cases. The pelvigraphy confirmed the excellent anatomical results: in only 1 patient a residual recto-anal intussusception and a residual rectocele was detected, she underwent STARR for symptoms of ODS. There was a significant improvement in the descent of the perineum, especially in patients associated the STARR (Table I). We didn't find cases of vaginal prolapse relapse. We observed a great reduction about the distance between vaginal vault and sacro pubic line (0.3cm).

Discussion and Comment

We are aware that the proposed technique, if taken into account by urogynecologists, will raise several arguments and will raise many doubts and perplexities. For this reason we wanted develop a follow-up sufficiently long and many case studies with data to support our claims. We received by other colleagues who applied POPS, results that confirms that POPS associated to STARR procedure, produced results of a much higher effectiveness than those reported in literature about traditional techniques, both trans-vaginal and colposacrosuspension. The high percentage of ODS in patients undergoing conventional surgery for POP may be the cause of the high recurrence rate. In fact, ODS inducing more straining for evacuation, causes a more mechanical stress to the pelvis. It may, therefore, be a cause of partial or total recurrence. The preservation of the uterus, suspending it in a natural position, involves significant surgical, functional and psychological benefits. In fact, all the complications related to surgical hysterectomy are avoided, the uterus will continue to divide the pelvis into two compartments and modulate straining for the evacuation and urination and at the same time prevents excessive dilation of bladder. Finally, we found that hysterectomy for women is a serious psychological trauma that can affect sexual activity. In reviewing the literature, we found that even Kapandji 9, in 1967, had proposed the suspension of the vagina, by tense subperitoneal skin-strips from the anterior superior iliac spines to the vagina.

In the original description the author completed the technique with the Douglassectomy and plastics of round ligaments routinely, more other possible interventions. This of course leads to excessive anteriorization of the vagina resulting in the widening of the space of Douglas. In addition, the stiff suspension of the iliac spines impede the natural movement of the vagina. However, the advantages of the intuition of the lateral suspension is commendable.

Conclusions

In conclusion we believe that the procedure proposed by us, given the results, was excellent in patients with the vagina walls elongated and that retain a good trophism. Ours proposal must be understood as a contribution from coloproctologist to gynecologists for a better comprehension of the rectum's role in this surgery. We emphasized that the genital apparatus represents also the anatomical support for the bladder and rectum and, therefore, inevitably the genital prolapse implies serious anatomical and functional alterations of these organs. Obviously, the gynecologist remains a specialist to refer for POP, but it is desirable to have a greater multidisciplinary collaboration.

Riassunto

Il nostro studio si propone di dimostrare la validità e la riduzione delle complicanze post-operatorie di una nuo-

va tecnica chirurgica atta a trattare il prolasso pluricompartimentale degli organi pelvici femminili: la P.O.P.S. coadiuvata dalla S.T.A.R.R.. Abbiamo trattato con questa metodica operatoria 73 pazienti che presentavano la patologia pelvica di cui sopra. I risultati nell'immediato post-operatorio e dopo un followup a un anno sono stati eccellenti rispetto alle metodiche tradizionali. Proponiamo questa nuova metodica come tecnica gold standard nell'approccio multidisciplinare alle patologie complesse del distretto pelvico femminile.

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