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Authors:	Mihaita C. D. DECA Mihai B. BRAILA Lucian E. STOICA Anca Daniela BRAILA

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INDIRECT ABDOMINAL URETHROCYSTOPEXY AND TRANSOBTURATOR SUBURETHRAL SLING IN THE TREATMENT OF STRESS URINARY INCONTINENCE

Mihaita C. D. DECA[1]
Mihai B. BRAILA[2]
Lucian E. STOICA[3]
Anca Daniela BRAILA[4]

ABSTRACT:
URINARY INCONTINENCE RESULTS FROM DEFICIENCY OF URETHRAL CLOSURE OR BLADDER DYSFUNCTION, CREATING A PRESSURE DIFFERENCE BETWEEN THE BLADDER AND THE PROXIMAL URETHRA. CORRECTING OR RESOLVING THE SUI REQUIRES SURGERY, WHOSE OBJECTIVE AND BASIC PRINCIPLE IS TO SUSPEND THE BLADDER NECK AND THE PROXIMAL URETHRA NOT ONLY TO ASCEND THEM BEHIND THE PUBIC SYMPHYSIS AT REST, BUT ESPECIALLY TO AVOID LOWERING OR TILTING THIS PORTION, THE URETHRO-VESIC JUNCTION DURING EFFORTS OF ANY KIND UNDER THE HORIZONTAL PLANE OF THE PUBIC SYMPHYSIS.
THE TREATMENT OF SUI IS USUALLY THE LAST THERAPEUTIC PROCEDURE AND MOST OFTEN THE ONLY ONE THAT CAN OFFER A GOOD PERCENTAGE OF LONG-TERM CARE. THE BURCH PROCEDURE OFFERS A CONTINENCE RATE OF OVER 75%, BUT IT MAY BE AFFECTED BY CERTAIN POSTOPERATIVE COMPLICATIONS THAT WE HAVE ENCOUNTERED (HEMATOMAS, COLLECTIONS OF OVERINFECTION) IN THE RETZIUS AREA, FINALLY RESOLVED BUT STILL PRESENT. THE SUBURETHRAL SLING VARIANTS ARE NEAR, WHEN WE SPEAK ABOUT THE RATE OF CONTINENCE, TO THE MOST IMPORTANT STUDIES PERFORMED IN RENOWNED UROGYNECOLOGY SCHOOLS IN THE WORLD, OF 90-95%. THE TOT BAND STABILIZES THE REGION TO SOFT, SOMETIMES LAX STRUCTURES, BASED IN PARTICULAR ON FIBROSIS IN TIME OF THE PERIPROTHETIC TISSUES. BEING THE CASE OF WOMEN WITH ONE OR MORE BIRTHS IN THE BACKGROUND AND WHO REQUIRED SURGERY FOR OLD PERINEAL RUPTURE, CYSTORECTOCELLUM, SUI, WE HAVE ASSOCIATED IN MORE THAN 2/3 OF CASES, THE TECHNIQUES OF CORRECTION OF SUI THE POSTERIOR COLPOPERINEORPHIA WITH HIGH MYORAPHY OF THE LEVATOR ANI.

KEYWORDS: STRESS URINARY INCONTINENCE, INDIRECT ABDOMINAL URETHROCYSTOPEXY, TRANSOBTURATOR SUBURETHRAL SLING

[1] PhD Student, Department of Urology, University of Medicine and Pharmacy of Craiova, Craiova County Emergency Clinical Hospital
[2] Department of Obstetrics and Gynecology, University of Medicine and Pharmacy of Craiova, Craiova County Emergency Clinical Hospital
[3] Department of Urology, Craiova County Emergency Clinical Hospital
[4] Department of Obstetrics and Gynecology, University of Medicine and Pharmacy of Craiova, Craiova County Emergency Clinical Hospital

INTRODUCTION

Stress urinary incontinence (SUI) is defined as an involuntary loss of urine through the urethra, beside the normal mictions, which appears to increase intra-abdominal pressure (coughing, sneezing, shaving, weight lifting, lowering stairs). Urinary incontinence results from deficiency of urethral closure or bladder dysfunction, creating a pressure difference between the bladder and the proximal urethra.

This condition is often a major handicap for the affected woman, with quite severe consequences on daily life, but especially with psychological consequences, most of the time, which cannot be neglected (isolation from others, family, friends, colleagues, society). The affection belongs to women of all ages, children but also men.

The initial management includes general measures, measures taken at the first contact of the patient with the family doctor, with the establishment of the disease history, the clinical examination, the first laboratory tests that exclude a possible urinary infection or another renal or genital urethro-bladder pathology (uterine polyfibromatosis) with ureterohydronephrosis, endometriosis, ovarian tumors, severe cervical dysplasia)[5]. If a treatment is initiated at this level, it is usually an empirical, conservative one.

Specialized management applies to patients whose diagnosis could not be established by the family doctor, whose initial treatment failed or to those patients whose history and symptoms suggest a more serious medical condition, which requires a specific specialized diagnosis and treatment. Some use urodynamic studies. Without being most often required, experienced clinicians, using a rigorous clinical examination and a few correct clinical tests, establish the anatomical-clinical diagnosis for the stress urinary incontinence (SUI).

Correcting or resolving the SUI requires surgery, whose objective and basic principle is to suspend the bladder neck and the proximal urethra not only to ascend them behind the pubic symphysis at rest, but especially to avoid lowering or tilting this portion, the urethro-vesic junction during efforts of any kind under the horizontal plane of the pubic symphysis.

The extraabdominalization of the urethro-bladder junction leads to the cancellation of pressure differences between the bladder and the proximal urethra at increasingly smaller efforts, an aspect that causes the involuntary loss of urine. The surgery aims to return, to the extent, to a status that is close to the initial one, the anatomical elements being reintroduced into the intra-abdominal pressure chamber (bladder neck, urethro-bladder junction, proximal urethra). Many operators have tried, through their techniques, to solve the SUI.

This resulted in over 200 procedures that aimed to reintegrate into the abdominal pressure chamber the bladder neck, the urethro-bladder junction, the proximal urethra. Thus, the direct vaginal colpouretrocystopexies (cases analyzed by us in another paper), the indirect abdominal colpouretrocystopexies have appeared, for the resolution of the SUI, cases that we have addressed in this paper. In 1961, Burch, uses the abdominal fixation of the bottom of the vaginal sac and of the endopelvic fascia adjacent to the proximal and middle portion of the urethra, to the pectineal ligaments or Cooper's ligaments (at the level of the posterior surfaces of the upper branches of the pubic bone)[6].

In 1965, Lapides, used to fix the bottom of the vaginal sac and of the endopelvic fascia adjacent to the proximal and middle portions of the urethra to the lower portion of the

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[6] Petros P.E., Ulmsten U.: An integral theory of female urinary incontinence: Experimental and clinical considerations: Acta Obstet Gynecol Scand; 153:7, 1990

aponeurosis of the right abdominal muscles[7]. In 1993, Liu published a series of 58 cases of laparoscopic colpocystosuspensions with a single complication (bladder injury also resolved laparoscopically)[8]. In 1966, E Aburel and T Rebedea practiced colpopyramidalopexy with a flap of pyramidal muscles and aponevrosis, suspending vaginal sac function in this flap[9].

The prevalence of SUI in women is variable with values between 2-57% for Europe[10] and slightly lower among the Asian population, with values between 5-27%[11]. Prevalence increases with age rising from 20-30%, in young patients, 30-40% in middle-aged patients and 30-50% in elderly patients.

It is variable in different countries in Europe: 23% in Spain, 44% in France, 41% in Germany, 42% in the United Kingdom[12].

In Europe, there are studies that confirm that in relation to the large number of women suffering from this disease, the number of those who are operated on is very small[13]. The bladder is an immobile, distensible organ. The role of the bladder is to accumulate and evacuate the urine from the upper urinary tract[14]. The main active element is the bladder detrusor muscle. Like the cardiac muscle, the bladder detrusor relaxes under the pressure exerted by the fluid to a certain limit (maximum bladder capacity), after which the muscular contraction, which comprises the entire syncytial mass of smooth muscle fibers, is initiated.

The important role in initiating the contraction is the pressure receptors located in the bladder wall located mainly at the base of the bladder. The bladder fundus is anatomically supported by the pubic-cervico-bladder fascia and the vaginal wall above the pelvic diaphragm (the upper vagina). The state of tension of this segment of vaginal wall, called by the Swedish authors, Petros and Ulmsten, the "area of critical elasticity" directly influences the mechanism of ensuring the urinary continence in normal circumstances[15]. If the vaginal wall is in excessive tension (tight colporafia) or the relaxed one (vaginal wall prolapse / colpocystocel), the area of pressure receptors, predominantly from the base of the bladder is activated, which causes the contraction of the detrusor, regardless of the state of fullness of the bladder.

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[8] Liu C.Y.: Laparoscopie retropubic colposuspension (Burch procedure): A review of 58 cases: J Reprod Med, 526-530, 1993

[9] Braila M.B., Sabina Berceanu, Lucia Cornea, Anca Patrascu. Tulburarile de statica genitala, capitol 33, pag 323-370, Ginecologie, vol II, Editura Didactica si Pedagogica RA Bucuresti, 2003

[10] Braila M.B., Oprescu S., Sabina Berceanu, V.Horhoianu. Tratamentul chirurgical in ginecologie, pag 106-162, Editura Medicala, Bucuresti, 2002

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[12] Zaharin R.F.: The antomic supports of the female urethra. Obstet Gynecol, 32, 754, 1968; Mellville J.L., Miller E.A., Fialkow M.F., Lenz G.M., Miller J.L., Fenner D.E.: Relationship between patient report and physician assessment of urinary incontinence severity, Am J Obstet Gynecol,189, 76-80, 2003; Bratila P.: The Anatomy of Urinary Continence in Women. Romanian J of Urogynecol Oel Floor Disorders1: 5-18, 2003

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[15] Quievy A., Couturier F., Prudhon C., Abram F., Al Salli R., Ansieau J.P.: Incontinence urinaire d`effort chez la femme. Physiophathologie et traitement chirurgical par les techniques de Burch et TVT; Presse Med, 31:80-86, 2002

Continence and evacuation of urine during the effort are two events that are achieved by closing, respectively opening, the bladder neck. The bladder neck represents a morphofunctional unit that unites the bladder reservoir with the urethral duct and can be identified with the internal sphincter of the urethra. The constitution includes a smooth muscle ring derived from the bladder trigon and two "U" shaped handles derived from the bladder (Heiss's handle and his back handle)[16]. According to the "Integral theory" which tries to explain the pathophysiology of the SUI, supported by the Swedish school, the closure of the bladder neck is achieved by three mechanisms:

1. The first mechanism of urethral closure. The normal state of the bladder neck is in the closed position. It is realized by the active contraction of the muscular fibers with slow action from the component of the anterior fascicles of the pubo-coccygeal muscles and of the periurethral striated muscles[17].
2. The second mechanism is achieved by elongation of the proximal urethra in the inferior and posterior direction by a muscular assembly of the pelvic diaphragm[18].
3. The third mechanism is a voluntary mechanism that involves the closure of the urethra, muscles that are not specialized. But they can be trained by pelvic gymnastics.

The main muscles are represented by three handles: * upper which is attached to the pubic symphysis and which draws the rectum and vagina anteriorly; * medium, attached to the coccyx, which draws the posterior rectum; * inferior, which attached anteriorly to the perineal body traction the rectum also anteriorly. This aspect explains why in the operations for RVP and SUI, many operators practice the posterior colpoperineorphia with the miorafia of the anal elevations in the indirect colpouretrocystopexias on the abdominal route but also in the suburethral sling TOT. The upper hand is the one that plays the main role in closing the urethra[19].

The pelvic-perineal diaphragm is crossed by three ducts: the urethra, the vagina, the rectum. Under normal circumstances, according to the integral theory, there is a perfect coordination that ensures a normal continence urinary / bladder-urethral and intestinal / rectal-anal. The giving birth, through hormone-induced local changes in pregnancy, but especially through obstetric trauma, causes certain changes in pelvic statics, especially the bladder-urethro-vaginal descent or uterus-vaginal prolapse of varying degrees. In conditions of effort, the content of urethro-bladder junction no longer corresponds to the optimal functional anatomy present before the installation of the state of pregnancy, to increasingly smaller efforts, settling involuntary losses of urine, respectively, SUI[20].

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[19] Delorme E., Droupy S., de Tayrac R., Delmas V.: La bandelette transobturatrice (Uratape) - Un nouveau precede mini-infasif de traitement de l`incontinence urinaire de la femme; Prog Urol, 13; 656-659; 2003; Miller J-J.R., Botros S.M., Akl M.N., Goldbergr R.P., Aschkenazi S.O., Beaumont J.L., Sand P.K.: Is transobturator tape as effective as tension-free vaginal tape in patients with borderline maximum urethral closure pressure? Am J Obstet Gynecol, 195:1799-804, 2006

[20] Rodriguez L.V., Raz S.: Prospective analysis of patients treated with a distal urethral polypropylene sling for symptoms of stress urinary incontinence: surgical outcome and satisfaction determineed by patient driven questionnaires; J Urol 170 : 857-863,2003; Luca V. "Limite si interferente in tratamentul medical si chirurgical al incontinentei de urina la femeie ". Medicina moderna, vol . IX ,nr. 2,75-82, 2002

MATERIAL AND METHOD

The study was carried out in the Clinic of Urology and in the Clinic of Obstetrics - Gynecology of the County Clinical Emergency Hospital of Craiova during the period 2017-2018-2019. The research consisted of analyzing 57 cases (32 cases in which two procedures of indirect urethrocystopexy were practiced on the abdominal route and 25 cases in which the suburethral sling TOT was applied). In almost all the cases, posterior colpoperineorafia with high miorafia of the anal elevators was performed, on the patients demand.

In 14 of the 25 cases of TOT suburethral sling, it was applied only the suburethral strip of polypropylene without associating the posterior colpoperineoraphia with the high mioraphia of the anal elevators and 11 cases in which the posterior colpoperineoraphia was associated. The anesthesia practiced was the locoregional rahidian one, in all the cases. From the anamnestic data together with the symptoms accused by the patients and the objective examination, we found the determinism and / or the influence of several factors in the appearance of the SUI:

1. Obstetric trauma in spontaneous births or in births with obstetric intervention / forceps application. Rortveit observed an epidemiological study with 15,307 patients, and it was found that the risk of SUI increased from small to large in that order: nulliparous, patients with caesarean section, patients who were born vaginally[21];
2. Predisposing factors, being predominantly racial;
3. Favoring factors (obesity, smoking associated with chronic cough, constipation);
4. Decompensation factors involved by more mechanisms: decrease of the intraurethral pressure by stimulating the urinary receptors (antihypertensive antagonists of alphaadrenergic receptors / Prazosin; cholinergic neuroleptics / Haloperidol, Chlorpromazine); increased intravesical pressure by increasing diuresis / diuretics; by diminishing the bladder filling following the anticholinergic treatments / Trihexifenidil or by the action of the beta-blockers / Pill and the installation of a bladder instability / Cisaprid; indirect effects on the urinary tract: conversion enzyme inhibitors, cough, constipation through opiate derivatives or iron preparations, alcohol or anxiolytic sedation; it was also found that in the emergence of SUI an important role would have some urological and gynecological operations performed in the background, without correcting the incontinence itself, called recurrent urinary incontinence. Through these unsuccessful operations, the mechanism would be: the impairment of the urethral sphincter, decreased resistance of the urethra or closing pressure, postoperative fibrosis, fixation of the urethra behind the pubic symphysis with loss of elasticity, failure to the raise or to the re-abdominal the urethro-bladder junction. Hilton and Stanton, l983, found that repeated failed operations were associated with low urethral pressure[22]; another important factor that should not be neglected is menopause. The estrogen deficiency can cause the weakening of the support of the bladder and the loss of hermetic closure of the urothelium. The diagnosis of SUI was firstly based on the anamnestic data in order to correctly differentiate the SUI from mixed urinary or mixed UI as well as the degree of incontinence.

   We insisted on some important aspects:

- information about the menstrual cycle, pregnancies, abortions, births, sex life;

[21] Rortveit G., Daltveit A.K., Hannestad Y.S., Hunskaar S.: Urinary incontinence after vaginal delivery or cesarean section. N Engl J Med; 348 (10): 900-7 , 2003
[22] Blavias J.G.: Multichannel urodynamic studies. Urology, 23-421, 1984

- genital-urinary surgical history;
- other impairements or diseases;
- treatments performed, possibly the medication used;
- trauma to the spine, neurological disorders, brain or spinal tumors, Parkinson's disease
After the general clinical examination the gynecological and urinary examination was performed:
- the inspection may eventually detect the old perineum rupture with cistorectocel;
- the valve examination reveals the vaginal mucosa, the cystectectocell, the vaginal sac bottoms, the cervix, any lesions, secretions that require the sampling for cytological, cytobacteriological and para-cytological examination;
- the vaginal touch is important because, besides the characteristics of the uterus (position, size, volume, consistency, mobility, sensitivity, parameters, vaginal sac bottoms, attachments) the urethra is palpated to find its mobility or fixity;
- We performed the Bonney maneuver, the TVT maneuver or the Ulmsten maneuver, the Jacquetin maneuver to tempt the distal support of the urethra, blocking the leakage of the urine, possibly mimicking the good effectiveness of a "sling" suburethral band. If negative, they suggest the clinical suspicion of sphincter incompetence. If they are positive, it mostly means it is about the SUI and can benefit from the suburethral sling with the polypropylene strip[23].

By age groups the 57 patients were divided into:
- group 40-50 years;
- group 51-60 years;
- group over 60 years.

The preoperative investigations were:
- serological ones (HLG, blood group / Rh group, blood glucose, urea, creatinine, uric acid, liver samples, coagulation tests);
- urine examination and / or uroculture;
- vaginal cytologic examination;
- examination of bacteriological and parasitological vaginal secretion;
- radiological examinations (simple renal-bladder radiography, intravenous urography, urinary microcystography, colpocystogram, pulmonary radiography);
- cardiological examination and EKG;
- neurological examination;
- Intensive care examination;
- urethrocystoscopic examination;
- endovaginal ultrasound.

RESULTS

On the age groups investigated

[23] Delorme E., Droupy S., de Tayrac R., Delmas V.: La bandelette transobturatrice (Uratape) - Un nouveau precede mini-infasif de traitement de l`incontinence urinaire de la femme; Prog Urol, 13; 656-659; 2003; Rodriguez L.V., Raz S.: Prospective analysis of patients treated with a distal urethral polypropylene sling for symptoms of stress urinary incontinence: surgical outcome and satisfaction determineed by patient driven questionnaires; J Urol 170 : 857-863,2003

- 40-50 years (18 cases; 31.9%);
- 51-60 years (26 cases; 45.6%);
- over 61 years (13 cases; 22.5%) we observed:

According to the data from the specialty literature, the patients from the 51-60 age group (45.6%) predominate in the group studied by us. After their origin 41 patients (71.9%) came from the urban area, 16 patients from the rural area (28, l%), 2/3 of the patients came from the urban area, which is due to the greater accessibility to the specific consultation, the degree of culture and civilization, the working and socio-economic conditions, the participation in certain social and cultural events that often impose a certain conduct and behavior.

The operations performed by us were:

- Indirect colpouretrocystopexy on the abdomen Burch, 26 cases (45.6%)[24];
- Lapides indirect colpouretrocystopexia by the abdominal tract 11 cases (20.4%)[25];
- Suburethral sling TOT - 20 cases (35%)[26]; In 14 of the 25 cases of suburethral sling, the TOT method was applied only the polypropylene strip without associating the posterior colpoperineorafia with the high miorafia of the anal elevators and 11 cases in which this posterior colpoperineorfia was associated with the miorafia of the anal elevators as in the colpour surgery. abdominal. In the 57 interventions was practiced thespinal locoregional anesthesia.

BURCH colpouretrocystopexia technique:

- Transversal suprapubic cutaneous incision, transverse incision with aponephrosis section of abdominal rights;
- It penetrates into the Retzius space from close to close to avoid damaging the vessels of the Santorini venous plexus;
- The balloon of the Foley probe and its urethral tract, the probe mounted before the abdominal approach are marked;
- Cooper ligaments are identified;
- It is mounted on the needle a non-absorbable or slowly resorbable thread and penetrates by the right parajunctional into the vaginal fornix tissue;
- Under this thread at about 0.5 -1 cm a second right paraurethral thread is attached;
- A third thread is attached below it at 0.5-1 cm. The three paraurethral threads pass through the Cooper ligament on the same side, right and left respectively. Due to possible post-operative incidents, we left in the Retzius space a polyethylene drain

[24] Quievy A., Couturier F., Prudhon C., Abram F., Al Salli R., Ansieau J.P.: Incontinence urinaire d`effort chez la femme. Physiophathologie et traitement chirurgical par les techniques de Burch et TVT; Presse Med, 31:80-86, 2002

[25] Braila M.B., Sabina Berceanu, Lucia Cornea, Anca Patrascu. Tulburarile de statica genitala, capitol 33, pag 323-370, Ginecologie, vol II, Editura Didactica si Pedagogica RA Bucuresti, 2003; Luca V. "Limite si interferente in tratamentul medical si chirurgical al incontinentei de urina la femeie ". Medicina moderna, vol . IX ,nr. 2,75-82, 2002

[26] Stoica L.E.: Tratamentul chirurgical minim invaziv al incontinentei urinare de efort la femeie. Slinguri suburetrale TOT. Teza de doctorat, UMF, Craiova, 2011; Delorme E., Droupy S., de Tayrac R., Delmas V.: La bandelette transobturatrice (Uratape) - Un nouveau precede mini-infasif de traitement de l`incontinence urinaire de la femme; Prog Urol, 13; 656-659; 2003; Miller J-J.R., Botros S.M., Akl M.N., Goldbergr R.P., Aschkenazi S.O., Beaumont J.L., Sand P.K.: Is transobturator tape as effective as tension-free vaginal tape in patients with borderline maximum urethral closure pressure? Am J Obstet Gynecol, 195:1799-804, 2006

tube externalized to the wall. Parietoraphia in anatomical planes and sterile bandage. Posterior colpoperineoraphia with high mioraphia of anal lift, vaginal table for 24 hours, Foley drainage for 24 hours.

The Colpouretrocystopexia LAPIDES technique:
It is similar to the Burch procedure. The difference is the fact that the wires in the Retzius space are passed in the reverse order of mounting on the vagina through the lower segment of the aponeurosis of the right abdominal muscles.
The complications we reported were two cases of hematomas and two purulent collections in the Retzius area, which required reintervention at 24-48 hours, haemostasis, washing, drainage. From these 4 cases we took the habit to drain all Retzius space in all subsequent ones.

The transobturator suburethral sling (TOT). The TOT technique was described by Emmanuel DELORME in 2001[27]. There were two ways of inserting the polypropylene strip:

- from the outside to inside (outside -in);
- from the inside to outside (inside -out, described by LAVAL).

We used the DELORME technique: The patient is placed in a gynecological position with the thighs well exposed laterally to expose the lateral space of the large labia. The following steps are practiced: The disinfection of the perianal and vaginal zone , the Foley drainage setting, the identification of the urethra and of the vesical neck with the ballonet.

Then we practiced a median incision of the anterior vaginal wall at 0.5 - 1 cm below the urethral meatus over a distance of 2-3 cm, but away from the bladder neck. The vaginal mucosa and the pubo-cervicala fascia are cut with the point directed towards the vaginal mucosa to avoid any injury to the urethra. The dissection is continued until the ischio-pubic bone is palpated on both sides. The lateral edge of the descending branch of the pubic bone is palpated and a buttonhole is made at this level, where this horizontal place intersects the urethral meatus or clitoris.

To pass the band on the left side of the patient, we hold the special device / tunnel with the right hand, place its tip in the tegumentary button created on the left, position perpendicularly on the tissues and press gently until the obturator membrane is passed (sensation of penetration in goal). With the index of the left hand in the vaginal trance, the tip of the tunnel is guided until it exits through the vaginal brace.

Then we practice posterior colpoperineorafia with high myoraphy of the levator ani, vaginal tampon and Foley drainage for 24 hours. With this technique we had no incidents, accidents, complications, the vital and functional prognosis being good and very good.

DISCUSSIONS

For more than five decades, the indirect abdominal colpouretrocystopexy Burch was the gold standard in correcting / resolving SUI. Those types of interventions practiced in old perineal rupture with cystorectocel and SUI like the direct, vaginal uretrocistopexies together with the indirect abdominal ones sometimes were accompanied by complications (hematomas, purulent collections, necrosis) that require surgical reinterventions. The introduction of the suburethral polypropylene strip as a minimally invasive procedure in the resolution of SUI has led to the reduction of morbidity through this pathology. The

[27] Delorme E., Droupy S., de Tayrac R., Delmas V.: La bandelette transobturatrice (Uratape) - Un nouveau precede mini-infasif de traitement de l`incontinence urinaire de la femme; Prog Urol, 13; 656-659; 2003

suburethral strip creates by the accumulation of macrophages and fibroblasts, a solid, fibrous area supporting the bladder fundus, the urethro-bladder junction, the proximal urethra for a sufficiently long period, without recurrence.

The suburethral stripe cancels the local conditions for the appearance of the SUI, ensuring the re-abdominalization of the urethroplastic junction, bladder neck, proximal urethra. To the present date, the suburethral sling TOT (Trans Obturator Tension) represents the most efficient and safe method of solving the SUI. The method has evolved in the world over the last decade by introducing new types of prosthetic, mixed, biological materials of collagen type associated with synthetic ones, giving a much better tolerance to them by the patient's body (VYPRO is a combination of polypropylene fibers and polyglactin fibers)[28]. New suspension techniques have also appeared, where the banding is anchored laterally through a clamp system, directly to the ischio-pubic branch of the coxal bone. This ensures a solid fixation and avoids the dissection of the Retzius space with its all consequences, sometimes unpleasant ones[29].

At the same time, it should be mentioned that there are schools of urology and urogynecology that address the Burch colposuspensia transparietal laparoscopically. The continence rate at 5 years is about 79%, after suburethral folding it was 61%, after transvaginal suspension with needle it was 65% [30].

CONCLUSIONS

The treatment of SUI is usually the last therapeutic procedure and most often the only one that can offer a good percentage of long-term care. The large number of surgical procedures in the resolution of SUI / over 200, reflects the multitude of problems raised by this pathology, which has many unknowns until the present moment.

The woman gave birht for thousands of years and according to Acad. E Aburel the birth is accompanied by certain unpleasant aspects such as the trivial type of old perineum ruptures, urogenital static disorders, cystectomy, SUI. To solve the SUI, the large number of techniques applied so far denotes that the problem will not be eliminated in the future, despite the material acquisitions / biological prostheses or the new endoscopic techniques / laparoscopy.

The techniques we approach in our research provided data comparable to other specialized studies in the foreign literature and in our own literature too. The Burch procedure offers a continence rate of over 75%, but it may be affected by certain postoperative complications that we have encountered (hematomas, collections of overinfection) in the Retzius area, finally resolved but still present.

The suburethral sling variants are near, when we speak about the rate of continence, to the most important studies performed in renowned urogynecology schools in the world, of 90-95%. The TOT band stabilizes the region to soft, sometimes lax structures, based in particular on fibrosis in time of the periprothetic tissues.

[28] Stoica L.E.: Tratamentul chirurgical minim invaziv al incontinentei urinare de efort la femeie. Slinguri suburetrale TOT. Teza de doctorat, UMF, Craiova, 2011

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Being the case of women with one or more births in the background and who required surgery for old perineal rupture, cystorectocellum, SUI, we have associated in more than 2/3 of cases, the techniques of correction of SUI the posterior colpoperineoraphia with high myoraphy of the levator ani. The vital and functional prognosis in all cases was good. For the perspective the objectives will be the acquisition of new biological materials better tolerated, cheaper and easier to obtain and the wider practice of endoscopic techniques / laparoscopy. For the young specialists in urogynecology even if they acquire new correction techniques in surgical treatment of the SUI it is advisable to know some classical techniques of colpouretrocystopexy.

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