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CONTENTS

1. A prospective randomized trial comparing tvt (tension-free vaginal tape) and TVT-O (inside-out transobturator vaginal tape) for the surgical treatment of stress urinary incontinence – Qatawneh Ayman	5
2. Pelvic floor functional evaluation. The trustworthiness and the reproducibility of perfect test – Benitez C.M.M., Waitman M.C., Camargo F.O., Wuo L.L., Moreno A.L., Sartori M., Girão M.J.B.C.	6
3. Primary perineal posterior hernia: an abdominoperineal approach for mesh repair of the pelvic floor – Matos D., Saad S.S., Salum M.R., Kobata M.H.P., Lustosa S.A.S.	7
4. Psyllium fibers as modulator of the fecal output in the ileostomy: is it possible? – Mancini S., Sarnari J., Piccinini S.	7
5. Predictive value of MUCP and VLPP for successful rate of TVT operation – Martan A., Masata J., Svabik K., Drahoradova P.	8
6. Artificial bowel sphincter. Our experience in the hospital clinic de Barcelona – González F.X., Bollo J., Lacima G., Carmona F., Puig-Clota M., Espuña M.	9
7. Electrophysiologic findings in patients with combined fecal and urinary incontinence – Gonzalez F.X., Lacima G., Pera M., Valls-Sole J., Puig-Clota M., Espuña M.	10
8. Long-term clinical results of biofeedback for fecal incontinence – Lacima G., Pera M., Amador A., González-Argenté F.X., Escaramis G., Ascaso C.	11
9. Parasacral and perineal sphincteroplasty – Korcek J., Bakos E.	12
10. Posterior intra-vaginal sling (pivs) for vaginal vault prolapse after hysterectomy: preliminary results of the first 50 operations with a novel procedure – Neuman Menahem	13
11. Impact of Urogenital Prosthetic Surgery on Sexuality – Caruso S., Rugolo S., Bandiera S., Carbonaro A., Cianci A.	14
12. TVT-obturator: preliminary results of the first 180 operations with a novel procedure for the treatment of female urinary stress incontinence – Neuman Menahem	15
13. Changes in the voiding phase induced by sub-urethral tapes (TVT® and TVT-O®): comparison at short follow-up – Pigné A., Valentini F., Nelson P.	16
14. The iberoamerican clinical study of a readjustable transobturator sling for the treatment of female stress urinary incontinence: 2-year outcome analysis – Palma P., Riccetto C., Dambros M., Thiel M., Herrmann V., Netto N.R., Jr, Contreras C., Retto H., Colaço J., Castro Diaz D.	17
15. Triple operation for prolapse using prostheses in the conservative and reconstructive surgery of pelvic defects – De Vita D., Santinelli G., Auriemma G.	18
16. Epidemiology risk factors of pelvic floor dysfunctions – Arbona J.C., Berra G., Daguerre P., Sarrouf J.	19
17. Video presentation: Prolapsus of remaining cervical stump. Case Report – Arbona J.C., Sarrouf J.R.	19
18. Laparoscopic treatment of rectal prolapse – González FX., Bravo R., Lacima G., Bollo J., Lacy A., Carmona F., Puig-Clota M., Espuña M.	20
19. Direct or overlapping primary anal sphincter repair? A systematic review of clinical trials and meta-analyses – Lustosa S.A.S., Matos D., Saad S.S., Salum M.R.	21
20. Overlapping sphincter repair for acquired anal incontinence – Matos D., Saad S.S., Salum M.R., Lustosa S.A.S.	22
21. Why is necessary an interdisciplinary approach in the boarding of vaginismus and dyspareunia? – Aliaga P., Freundlich O.	23

22. The value of dynamic transperineal ultrasound (DTPUS) vs anorectal ultrasound (ARUS) in the evaluation of fecal incontinence – Beer-Gabel M., Issa N., Assoulin Y., Mahor Y., Avidan B., Bar Meir S.	24
23. Diagnosis of cul de sac hernia: dynamic proctography (DP) or dynamic transperineal ultrasound (DTPUS)? – Beer-Gabel M., Assoulin Y., Amitai M., Sarig Y., Bar Meir S.	25
24. POPQ and symptoms 5-14 years after vaginal sacro-spinous fixation – Aigmueller Th., Dungal A., Hinterholzer S., Riss P.	26
25. Vaginal sacro-spinous fixation and long-term sexual function – Dungal A., Aigmueller Th., Bauer H., Riss P.	27
26. Neurophysiologic assesment in urinary incontinence – Bogacz D., Bogacz A., Cura G.	28
27. Long term results of anal incontinence treatment – Pavalkis D., Venclauskas L., Saladzinskas Z., Tamelis A.	29
28. Tension-free vaginal mesh fifty-fifty in severe cystocele repair: pilot study – Dati S., Palma D., Cinque B.	30
29. Posterior tibial neuromodulation (PTNM) in the treatment of overactive bladder (OAB) – Vicente E., Hannaoui N., Gonzalez J.L., Pã J.A., Prats J., Garcia D., Prera A., Abad C.	31
30. Ileal orthotopic neobladder in female: functional results – Andretta E., Sangiorgio A., Mazzariol C., Pastorello M., Garbeglio A., Ostardo E.	32
31. Epidemiological and physiopathological aspects about interstitial cystitis in the population of north-eastern italy – Ostardo E., Sangiorgio A., De Antoni P., Dominese A., Garbeglio A.	33
32. Neurophysiopathological study of the pelvic floor in patients with interstitial cystitis – Ostardo E., Sangiorgio A., Dominese A., Garbeglio A.	34
33. Colposacropexia with vypro mesh (polypropileno/polyglactin 910 composite) for grade III y IV POP-Q genital prolapse correction – Braun H., Vargas D., Dell'Oro A., Arellano M., Pizarro J., Gonz ález F., Ferrández M., Rojas I.	35
34. Descriptive analisis of the anatomical repairs of boarding transobturatriz for the correction of the previous compartment in the stress urinary incontinence (our experience) – Vilchez Acosta R., Torres H., Calomite A., Mosso F. Baldarena C., Alberti D., Stortini L.	36
35. Complications after tension free mid urethral sling procedure for stress urinary incontinence (tvt-tot): diagnosis and management – Dell'Oro A., Braun H., Bustamante C.A., Pinochet R., Cabello J.M.	37
36. TVT®/TVT-SPARC®/TOT-SAFYRE®: comparison of a personal sequence of vaginal sling procedures – Kuschel S., Dost F., Werner M., Schuessler B.	38
37. ICSplus: an extension of vaginal posterior wall prolaps staging – Kuschel S., Werner M., Najjari L., Bucher S., Sc̈sler B.	39
38. Rational bases of the colposuspention at the sacrociatic minor ligament – Mariconde J., Gallardo G., Ąuregui E., Donati V., Moya Encinas N.	40
39. Parcial colectomy: a surgical alternative in elderly patients with severe defect in apical segment – Descouvieres C., Cohen D., Osorio R., Acevedo C., Riveros L., Lpez J.	41
40. Experience with transobturator vaginal tape inside-out for the treatment of female stress urinary incontinence – Descouvieres C., Lpez J., Cohen D., Acevedo C., Riveros L.	42
41. Incidence of fecal incontinence in patients with urinary incontinence – Waitman M.C., Boaretto J.A., Casellato T.F.L., Gimenez M.M., Wuo L.L., Moreno A.L., Gir ão M.J.B.C.	43
42. Evaluation of the sexual insatisfaction in women with urinary incontinence – Waitman M.C., Wuo L.L., Moreno A.L., Gimenez M., Benitez C.M., Boaretto J., Sirēs R.D., Girão M.J.B.C.	44

43. Musculature conscience and force evaluation of the pelvic floor in women with sexual dysfunctions – Waitman M.C., Wuo L.L., Moreno A.L., Benitez C.M., Bellomo F.G., Simões R.D., Girão M.J.B.C.	45
44. Pelvic indications and lumbar pain in women with chronic pelvic pain – Wuo L.L., Miranda R., Waitman M.C., Trípoli T.M., Moreno A.L., Girão M.J.B.C., Apollaro E.F.	46
45. Triggers points in women with chronic pelvic pain – Wuo L.L., Camparim P., Miranda R., Trípoli T.M., Waitman M.C., Girão M.J.B.C., Schor E.	46
46. Articular alterations of the lumbar, sacred-iliaca and femoral lame column in women with chronic pelvic pain – Wuo L.L., Trípoli T.M., Miranda R., Moreno A.L., Waitman M.C., Girão M.J.B.C., Sato H.	47
47. Current Modalities in Pelvic Floor Rehabilitation – Oviedo J.G., Rodriguez C., Alfaro J.A., Velazquez M.	47
48. Massive irreducible pelvic organ prolapse due to huge fibroid – Rajamaheswari N., Seethalakshmi K., Meena M.	48
49. Vesico uterine fistula – A review – Rajamaheswari N., Seethalakshmi K., Meena M.	49
50. Vesico vaginal fistula – Indian experience – Rajamaheswari N., Seethalakshmi K., Meena M.	50
51. Abdominal surgery for uterovaginal prolapse: sacropexy vs hysterocolposacropexy – Costantini E., Mearini L., Zucchi A., Giannantoni A., Vianello A., Saccmanni M., Del Zingaro M., Porena M.	51
52. Doppler Guided Haemorrhoidal Artery Ligation (HAL Doppler): a new treatment for II and III degree haemorrhoids: technique and functional results – Testa A., Romano P.	52
53. Surgery for stress urinary incontinence – Grossi O., Longo E., De Marco R.	53
54. To evaluate female sexual function after colpoperineoplasty – Hyun Hee Jo, Jin Hong Kim	53
55. Combined obturator - pre pubic cystocele and incontinence repair: preliminary results – Palma P., Contreras O., Sarsoti C., Riccetto C., Geo M.S., Muller V., Del Roy C.	53
56. Pelvic disfunction in constipated patients: the role of manometric evaluation – Vieira E., Pupo-Neto J., Lacombe D.	54
57. Transobturator crossover sling for complex stress urinary incontinence – Palma P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto jr. N.R.	55
58. Adjustable male sling: combined pre and retro pubic approaches – Palma P., D. Neto P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto Jr. N.R.	56
59. Adjustable continence therapy (ACT) for incontinence post orthotopic neobladder in female – Palma P., Riccetto C., Dambros M., Herrmann V., Thiel M., Müller V., Netto Jr. N.R.	57
60. Combined obturator - pre pubic cystocele and incontinence repair: Rationale & Technique – Palma P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto jr. N.R.	58
61. Defecography in the study of posterior compartment of the pelvic floor in patients with genital prolapse – Gimeno Solsona F., Salvador Izquierdo R., Lacima Vidal G., Maiques Llàcer J.M., Espuña Pons M., Rovira Fius J.M., Iglesias Guiu X.	59
62. Pelvic surgery and pelvic floor posterior compartment disorders – Salvador Izquierdo R., Gimeno Solsona F., Maiques LLàcer J.M., Lacima Vidal G., Espuña Pons M., Rovira Fius J.M., Iglesias Guiu X.	60
63. Pelvic floor therapy with EMG-Biofeedback for chronic voiding dysfunction and detrusor sphincter dyssinergia in children: A preliminary report of the clinical evaluation of urodynamic findings, cystography, ultrasound bladder measurements and quality of life efficacy in the long term follow up study – Kracochansky M., Trigo Rocha F., Dambros M., Riccetto C., Palma P.C.R. ..	61

64. Repair of posterior vaginal wall prolapse using tensión free mesh – Amato A.R., Zangone M.A., Ponte D.A., Calamera P.M., Murias S.	62
65. Transurethral vesical eversion – Ubertazzi Longo E., Soderini H., Gerding A., Pruneda Paz J.	62
66. Results of the use of forceps and vacuum extractor to reduce the third stage of labour and its effects over the pelvic floor – Illia R., Marzik C.F., Uranga Imaz M., Häbich D., Fernández M., Manrique G., Engel M.	63
67. Evacuatory disorders and pelvic floor dysfunction associated with perineurial cysts – Bertoti A.C., Marzik C.F., Rotholz N., Duarte J.M., Gori J.R.	64
68. Cistoproctography with dinamic magnetic resonance (DMR) – Ocantos J., Fattal jaef V., Pietrani M., Seclen F., Benatti M., Seehaus A.	64
69. Abnormal urethral emg in urinary retention (UR) in man – Bertotti A.C., Gonzalez Primomo N.S., Duarte J.M., Ghirlanda J.M.	65
70. Evaluate of two synthetic slings for treatment of stress urinary incontinence: results and complications – Salvador Geo M., Correa Lima R., Laranjeira C., Figueiredo Kaukal J., Iamin L., FernandesR., Junqueira M., Sousa C.	65
71. Severe incontinence caused by tethered vagina syndrome: the results of surgical procedures – Salvador Geo M., Correa Lima R., Laranjeira C., Figueiredo Kaukal J., Iamin L.	66
72. Rectal procidentia treatment by perineal rectosigmoidectomy combined with levator ani repair – Habr-Gama A., Jacob C.E., Seid V.E., Perez R.O., Scavavini Neto Beani Jr A., Marubayashi L.Y., Gebrin L.H., Kiss D.R.	66
73. Anal incontinence in men with normal or increased intra-anal pressures: clinical and manometric parameters – Jorge J.M.N., Gasparetti Jr N.L.T., Oliveira K.M.J., Kracochansky M., Yusuf S.I.A., Habr-Gama A., Kiss D.R.	67
74. Transphincteric injection of Durasphere® for incontinence due to internal anal sphincter dysfunction – Jorge J.M.N., Yusuf S.A.I., Habr-Gama A., Kiss D.R., Gama-Rodrigues J.J.	68
75. The prepubic mininvasive technique: how does it work? – LeanzaV.	68
76. Clinical outcomes of biofeedback treatment in patients with fecal incontinence: a comparative study with untreated patients – Lacima G., Pera M., Amador A., González-Argenté F.X., Escaramis G., Ascaso C.	69
Authors Index	70

A PROSPECTIVE RANDOMIZED TRIAL COMPARING TVT (TENSION-FREE VAGINAL TAPE) AND TVT-O (INSIDE-OUT TRANSOBTURATOR VAGINAL TAPE) FOR THE SURGICAL TREATMENT OF STRESS URINARY INCONTINENCE

Qatawneh Ayman

Urogynecology Unit., Jordan university hospital, Amman, Jordan

Objective: Over the past decade there has been a significant shift towards less invasive continence surgeries including TVT and TVT-O. The purpose of this study is to compare the TVT and TVT-O for the surgical treatment of stress urinary incontinence in women.

Methods: Between May 2004 and February 2005, 43 women with symptomatic urodynamic stress urinary incontinence were randomly allocated to one of the above surgeries. Prior to surgery, all women completed standardised history, physical examination (POP,Q) and multichannel substracted urodynamics. Postoperative reviews were conducted at 1 month, 2 months and at 2 monthly intervals, included evaluation of stress urinary incontinence, urgency/urge incontinence, lower urinary tract symptoms (LUTS) suggestive of bladder outlet obstruction/retention, physical examination with a stress test, and PVR. Patient satisfaction measured according to a visual analogue score from 0 to 100. The mean length of review is 9 months for both groups.

Results: In preliminary results there were no difference between the two groups in patients demographics. The mean operating time, Catheter days, overactive bladder and voiding dysfunction symptoms were more in the TVT group than TVT-O group. The subjective and Objective outcome and patient satisfaction were similar in the two groups. No bladder injury in the TVT-O group.

Conclusion: The short term results of this prospective randomised trial suggest that both TVT and TVT-O are equally effective in women with SUI. TVT-O has less operating time, bladder injury, overactive bladder and voiding dysfunction.

PELVIC FLOOR FUNCTIONAL EVALUATION. THE TRUSTWORTHINESS AND THE REPRODUCIBILITY OF PERFECT TEST

Benitez CMM, Waitman MC, Camargo FO, Wuo LL, Moreno AL, Sartori M, Girão MJBC
UNIFESP, Escola Paulista de Medicina, Departamento de Ginecologia, São Paulo, Brazil

Objective: Confirm the trustworthiness and the reproducibility of PERFECT test, using the perineometer as a standard gold and comparing with intertester results.

Casistic and method: 50 patients of the Physical therapy Clinic had been evaluated. 68% women have Stress Urinary Incontinence (SUI), 24% women have Mixed Urinary Incontinence (MUI) and 8% women have Urgency Urinary Incontinence. The age of the patients varied of 29 to 74, with average of 51,88 and 94% of the women had been carried through normal childbirth.

All the patients had been evaluated in the supine in lithotomy. The evaluation was carried through by means of digital palpation and with perineometer, in accordance with the parameters of test PERFECT. The type of perineometer used in this research, was from QUARK model PERINA. Between the evaluations 15 minutes rest had been given and enter the registered parameters of the method PERFECT, form given 2 minutes of interval.

The study it had blind double character and the evaluations had been carried through by two qualified examiners for such function, in the maximum interval of 1 week.

Results: Using the coefficient of Spearman (CCS), and the coefficient of correlation interclass (CCI), analyzes demonstrated it the following results for method PERFECT, for P = Power $r = 0,759$ and $r = 0,842$ for E = Endurance $r = 0,492$ e $r = 0,768$, for R = Repetition $r = 0,750$ and $r = 0,0825$ and for F = Fast $r = 0,679$ and $r = 0,809$ all with $p < 0,01$. The intern consistence (K) between digital test and perineometer was 0,793 and 0,087 for examiner 1 and 0,748 and 0,627 for the examiner 2.

Conclusion: The functional assessment of muscles of pelvic floor PERFECT is consider with a good trustworthiness and reproducibility, because has been proved the high intertester correlation.

PRIMARY PERINEAL POSTERIOR HERNIA: AN ABDOMINOPERINEAL APPROACH FOR MESH REPAIR OF THE PELVIC FLOOR

Matos D, Saad SS, Salum MR, Kobata MHP, Lustosa SAS

Gastroenterological Department, UNIFESP-Escola Paulista de Medicina, São Paulo, Brazil

Introduction: Spontaneous development of perineal hernias is a very rare condition and many techniques have been described for repairing the floor defect. The use of a combined approach for the reconstruction of the muscle pelvic floor with mesh repair is presented.

Methods: The case of one patient with a huge primary perineal hernia is reported, with progressive bulging in the buttock area, obstipation and fecal incontinence. Digital examination showed a normal anal canal and then displaced rectum. A defect in the levator ani musculature, along the posterior-lateral wall of the rectum could be observed. The mass could be partially reduced, with both hands, into the pelvis. A barium enema has shown that the whole sigmoid occupied the hernial sac and anal manometry showed discrete lower pressures at rest.

A combined abdomino-perineal approach showed a herniation of the sigmoid and upper and medium rectum through a 5cm defect in the right levator ani muscles and had dissected to a subcutaneous position in the buttock. A 7x5 cm polypropylene mesh was sutured across the defect with 3-0 prolene stitches. Through abdominal approach the rectum was replaced to its sacral position by suturing posteriorly another 5x3 cm polypropylene mesh with 3-0 prolene stitches. A vacuum drain was inserted. Skin was closed with interrupted vycril 3-0 stitches. Uneventfully discharge at day 6.

Results: 5 years follow-up has shown no recurrence and normal bowel function. Patient has no need for medical assistance and sitting comfortably.

Conclusion: It is concluded that primary perineal hernia can be repaired by a combined surgical approach, by using prosthetic material. Reduction of the hernia, dissection of the peritoneal sac, careful muscle repair and adequate positioning of the polypropylene mesh are important steps.

PSYLLIUM FIBERS AS MODULATOR OF THE FECAL OUTPUT IN THE ILEOSTOMY: IS IT POSSIBLE?

Mancini S., Sarnari J., Piccinini S.

Ospedale di Civitanova Marche, U.O. di Chirurgia

Objective: To evaluate the influence of Psyllium therapy on stool characteristics, frequency and consistence.

Methods: Twenty subjects with ileostomy have been considered (ten males, ten females); have been calculated the fecal weight, the electrolyte loss, the gas production and the consistency before and during the assumption of Psyllium 7 g b.i.d.

Results: There is a significant increase of stool consistency and gas reduction with an improvement of the Quality of life.

Conclusions: The intake of Psyllium fibers can improve the acceptability of the stoma.

PREDICTIVE VALUE OF MUCP AND VLPP FOR SUCCESSFUL RATE OF TVT OPERATION

Martan A., Masata J., Svabik K., Drahoradova P.

Department of Obstetrics and Gynecology, Charles University, Prague, Czech Republic

Objective: To ascertain whether the pre-operation values of MUCP [Maximum urethral closure pressure] and VLPP [Valsalva leak-point pressure] have any predictive value in determining the success rate of TVT [tension free vaginal tape] operation.

Methods: 59 women after TVT operation were included in the study. The average age was 54.8 (SD=10.5), BMI 27.6 (SD=4.7) and parity 1.9 (SD=0.6). A pre-operative urodynamic examination was performed on patients in the supine position; the urinary bladder was filled with 300 and 500 ml of normal saline solution. VLPP was assessed during perineal US examination using an ultrasound contrast medium for detection of urine leakage, and simultaneous recording of abdominal pressure was performed to detect VLPP. Of the 59 patients who underwent the operation, 47 subsequently had no problems (A), 8 suffered urgency symptoms (B), and in 4 (C) mild stress incontinence still persisted. Groups A, B, C were compared using Kruskal-Wallis test or Pearson χ^2 -test where appropriate.

Results: In the group of patients (n=15) with MUCP before surgery ≤ 30 cm H₂O, 10 women were without problems after the operation, 3 suffered urgency symptoms and in 2 mild stress incontinence still persisted. Among women with MUCP >30 cm H₂O (n=38), 32 were without problems, 5 suffered urgency symptoms and in 1 mild stress incontinence still persisted. This difference, however, was not statistically significant. The same is valid for women with VLPP ≤ 60 cm H₂O and VLPP > 60 cm H₂O; between these groups there was no statistically significant difference in success rate of this operation.

Conclusions: Pre-operation values of MUCP and VLPP cannot be used to predict the effect of the operation, though we are aware of the fact that our results were ascertained on a rather small number of patients in the groups of patients with complications.

This work was supported by the Grant Agency of the Ministry of Health of the Czech Republic, Grant NH 7378-3.

ARTIFICIAL BOWEL SPHINCTER. OUR EXPERIENCE IN THE HOSPITAL CLINIC DE BARCELONA

González F.X., Bollo J., Lacima G., Carmona F.*, Puig-Clota M.*, Espuña M.

General Surgery and Digestive Motility Unit. Institut de Malalties Digestives. Urogynecological Unit*, Hospital Clínic de Barcelona, Spain

The use of artificial bowel sphincter (Acticon Neosphincter) may be a valid alternative for the treatment of patients with severe fecal incontinence. However, the long term results of this procedure have not been as promising as expected since some studies have demonstrated complications in 35 – 86% of the patients.

Objective: To present our results using artificial bowel sphincter (ABS) in the Hospital Clínic of Barcelona, Spain.

Patients and Methods: From March 2002 to June 2004 we implanted five ABS in four patients (3 women and 1 man) with severe fecal incontinence. All were refractory to medical and dietary treatment and to biofeedback. The mean age was 51.5 ± 17 years. Preoperative functional and radiological studies were performed in all the patients to establish the causes of fecal incontinence as idiopathic in 1 patient, neurological in 2 and traumatic in 1 patient. In 2 patients a temporary sacral neuromodulator was implanted previously but it was not effective. We used the Wexner and Vaizey scores to evaluate the severity of fecal incontinence. Patient quality of life was assessed with the FIQL scale (27-108).

Results: The mean follow up was of 21 ± 15 (5 -37 months). During the postoperative period one patient had leakage of the perineal wound requiring cuff removal. This device was replaced after 6 months with no problems to date. There were no infections. One patient presented one episode of fecal obstruction. Continence improved: from 16 ± 2.8 preoperatively to 4 ± 1.6 postoperatively with the Wexner score (0-20 points) and from 21.7 ± 1.25 to 4 ± 1.6 , respectively, with the Vaizey score (0–24 points). The FIQL scale also improved from 42 ± 2.4 to 96 ± 2.12 .

Conclusions: In our experience the ABS is a valid alternative for the treatment of fecal incontinence improving both the continence and the quality of life in patients with a low morbidity.

ELECTROPHYSIOLOGIC FINDINGS IN PATIENTS WITH COMBINED FECAL AND URINARY INCONTINENCE

Gonzalez F.X., Lacima G., Pera M.*, Valls-Sole J., Puig-Clota M., Espuña M.

Pelvic Floor and Digestive Motility Unit, Hospital Clinic, Barcelona.

*Colorectal Surgery, Hospital del Mar, Barcelona

Introduction: Several clinical, urodynamic and manometric findings suggested neurological damage as a contributing factor in the development combined fecal and urinary incontinence (CFUI).

Objective: To determine whether pudendal neuropathy is more frequent in patients with double incontinence than in those with isolated fecal incontinence (IFI).

Methods: Ninety-three women with CFUI and 36 women with IFI were prospectively investigated. All patients underwent anal manometry, endoanal ultrasound, electromyography (EMG), and pudendal nerve terminal motor latency (PNTML).

Results: No statistically significant differences were found in the age, history of vaginal delivery and chronic straining between both groups. However, the rate of postmenopausal women was higher in the CFUI group (85% vs. 67%; $p=0.02$). Menopause was an independent risk factor of having double incontinence (OR: 1.4; $p=0.02$). Concentric needle EMG of the external anal sphincter revealed increased duration of the motor unit potentials (MUP) in 43% and 53% of patients with CFUI and IFI, respectively ($p=0.28$). An increased number of polyphasic MUPs was detected in 52% and 58%, ($p=0.6$). There was no statistically significant difference in the prevalence of either bilateral (20% vs. 27%) or unilateral (23% vs. 14%) prolonged mean PNTML between the CFUI and the IFI group 2 ($p=0.3$). The mean PNTML of patients with CFUI was not significantly more prolonged than in patients with IFI (2.9 ± 1.2 vs. 3.1 ± 0.9 ; $p=0.8$).

Conclusions: Pudendal neuropathy is not a distinct characteristic of patients with double incontinence. The prevalence of pudendal neuropathy in these patients is similar to that observed in patients with IFI. Others factors should be investigated to explain the common association of both types of incontinence.

LONG-TERM CLINICAL RESULTS OF BIOFEEDBACK FOR FECAL INCONTINENCE

LacimaG., Pera M.*, Amador A., González-Argenté F.X., Escaramis G., Ascaso C.

Pelvic Floor and Digestive Motility Unit, Digestives Diseases Institut, Hospital Clinic, Barcelona, Spain.*
Colorectal Surgery Unit, Hospital del Mar, Barcelona, Spain

Introduction: Biofeedback has been demonstrated to be effective in more than 70% of patients with fecal incontinence but long-term follow-up studies show controversial results.

Objective: Our aims were to analyze the short-term and long-term efficacy of biofeedback therapy for fecal incontinence and to assess whether biofeedback is effective as the only treatment in these patients.

Patients & Methods: Seventy-nine patients with fecal incontinence to solid stool were prospectively included in the study. All treatment sessions of biofeedback were monitored with anal manometry. Clinical evaluation by means of a questionnaire was performed at baseline and 1 month, 6 months, 3 years and 5 years after completing the treatment (5 sessions). The primary variable was number of episodes of incontinence. According to clinical outcome patients were classified in 3 groups: Recovery of continence (A), reduction of the number of episodes of incontinence greater than 75% (B) and reduction of the number of episodes of incontinence lower than 75% (C). Biofeedback was considered effective as the only treatment when patients referred less than 1 episode per month.

Results: Table 1 depicts the number and percentage of patients in each group at short and long-term follow-up. Comparison of the number of episodes of incontinence between baseline and each time interval was statistically significant ($p < 0.001$). However, we found no difference in the severity of incontinence between 6 months, and 3 and 5 years. Biofeedback was effective as the only treatment in 59%, 63% and 57% of patients at 6 months, 3 and 5 years respectively.

Clinical Outcome				
	1 month 78 (%)	6 month 71 (%)	3 years 53 (%)	5 years 31 (%)
A	42 (54)	29 (41)	20 (37)	10 (33)
B	24 (32)	34 (48)	25 (48)	18 (57)
C	11 (14)	7 (11)	8 (15)	3 (10)

Conclusions: Biofeedback improves continence immediately after beginning of treatment. The efficacy of biofeedback is maintained on long-term follow-up.

PARASACRAL AND PERINEAL SPHINCTEROPLASTY

Korcek J., Bakos E.

Department of Surgery, Section of Colorectal Surgery, Nitra, Slovak republic

Objective: The authors investigated the outcome of a combined parasacral and perineal approach (CPPA) in the surgical therapy of anal incontinence.

Methods: Between May 1997 and May 2005 the authors examined 56 female and 7 male patients (pts.) with anal incontinence as a set of the diagnostic algorithm. The authors apply this algorithm if the pts. Continence grade score (CGSS) by Wexner is more than 5 points. After determining the CGSS, they perform a digital and endoscopic examination, anal manometry (AM), colonic transit time measurement, cindefecography, examination of anal electro-sensitivity, endoanal sonography and PNTML. After having determined the PNTML, the authors divided the entire set as follows: 47 pts. with unilateral or bilateral neuropathy (UBN) n. pudendalis with simultaneous defect of the sphincter apparatus (SA). The authors performed a "total pelvic floor repair", combined with a treatment of the defect at the front periphery of the SA with "overlap plasty" in all 47 pts. There was no defect at the SA in 7 other female pts. with UBN. A CRPF using the same approach was made in all cases. In 9 pts. with normal PNTML the authors only treated the defect of the SA with "overlap plasty".

Results: The CGSS values determined postop. were in correlation with the values measured postoperatively by anal manometry (using the Student "t" test), but the authors found important differences between the values measured by AM preoperatively and postoperatively (p less than 0,05). Postoperatively measured values were on average 105 degrees of the anorectal angle in the set of pts. with neurogen anal incontinence.

Conclusions: The CPPA used in the surgical therapy of various kinds of anal incontinence enables a safe performance of the releasing posterior, plication of the muscle puborectalis, plication and/or reconstruction of the sphincters, with everything under full visual control.

**POSTERIOR INTRA-VAGINAL SLING (PIVS) FOR VAGINAL
VAULT PROLAPSE AFTER HYSTERECTOMY:
PRELIMINARY RESULTS OF THE FIRST 50 OPERATIONS
WITH A NOVEL PRECEDURE**

Neuman Menahem

Urogynecology, Dept. of Gynecology, Shaare Zedek Medical Center, Jerusalem,
Ben-Gurion University of the Negev

Objectives: Vaginal vault prolapse is a well-known post hysterectomy complication, of an undetermined occurrence. This severe situation, which is due to pelvic floor herniation, might be dealt with by an abdominal or vaginal approach – both are reported to entail operative complication and troubling failure rate. The aim of this study is to evaluate the preliminary data of first 50 Posterior Intra-Vaginal Sling (PIVS) patients' series.

Methods: A total of 50 post hysterectomy patients with vagina vault prolapse had the PIVS operation and were followed up for 6 to 15 months. The PIVS tape was inserted trans-Gluteally, passed para-rectally and sutured to the vaginal apex to support it supra levatorly. The PIVS procedure does not require either laparotomy neither deep pelvic trans vaginal dissection. Results: Intra-operative complications were not recorded. Hospitalisation period was short: for 35 (70%) of the patient it was a day care while the rest were discharged on the first post operative day. 49 patients reported satisfaction with the therapeutic results. One patient presented with therapeutic failure. One patient had post-operative Gluteal skin infection and was treated with surgical removal of the infected tape arm. The other tape arm was left in place, maintaining the therapeutic results. Another patient had tape protrusion into the vagina and this was removed successfully at the outpatient clinic. One patient suffered post-operative fever of unknown origin, which resumed with oral antibiotics.

Discussion: The PIVS is a novel operation for correction of post hysterectomy vaginal vault prolapse, designed to reduce complication rate and rehabilitation period. This series result agrees with previously reported efficacy, safety and simplicity of this procedure. However, long-term data is required for drawing solid conclusion concerning the superiority of one of the discussed operative techniques.

IMPACT OF UROGENITAL PROSTHETIC SURGERY ON SEXUALITY

Caruso S., Rugolo S., Bandiera S., Carbonaro A., Cianci A.

Microbiology and Gynecological Science Department, University of Catania, Italy

Sexual dysfunction have been reported to occur commonly in women with urinary incontinence and uterovaginal prolapse. Surgical correction of cystocele and stress urinary incontinence with prosthetic surgery could be associated with worsening sexual function and increased dyspareunia, due to the mesh used. We studied 19 postmenopausal women (mean age 56.7 ± 3.4), with normal BMI (24.3 ± 3.8) that underwent surgery to correct prolapse with polypropylene meshes. All women were affected by second or third degree cystocele (according to Baden & Walker classification). After urodynamic assessment that evidenced mechanical obstruction (mean Q-max at uroflowmetry $14,2 \pm 1,6$ ml/sec) they were treated with polypropylene mesh to correct prolapse.

Twenty postmenopausal women with similar demographic characteristic ($P=NS$) without urogenital problems composed the control group.

Each woman underwent the Interview for Sexual History before surgery and after six months, and the Pelvic Organ Prolapse-Urinary Incontinence Sexual Function Questionnaire (PISQ) was used to study the sexual activity after prosthetic surgery; the items of PISQ that we analyzed were sexual frequency, dyspareunia, vaginal sensitivity, sexuality of partner and quality of relationship, desire, and orgasm. Finally, a sildenafil test was used to study the changes of clitoral and vaginal blood flow before and after six months from surgery.

Results: women referred changes in their sexuality after surgical treatment: sexual activity and orgasm improved, while vaginal sensitivity decreased; worse relationship was observed analyzing the items of questionnaire while the level of sexual desire was unchanged. Sexual activity of the control group appeared to be always better than women treated with prosthetic surgery ($P<0.05$).

Sildenafil test improved the clitoral and vaginal blood flow on women who underwent the prosthetic surgery; the resistance index and the pulsatility index values showed to be better than pre test values ($P<0.05$) showing that prosthetic surgery worse vaginal and clitoral blood flow. Actually we are studying the effects of TOT procedure on sexuality, verifying changes in clitoral and vaginal blood flow the parameters.

Conclusion: urinary incontinence and urogenital prolapse affect sexual activity and sexual relation. Interestingly, even if prosthetic surgery resolves the urogenital disorder, not always it succeeds in treating sexual dysfunctions

TVT-OBTURATOR: PRELIMINARY RESULTS OF THE FIRST 180 OPERATIONS WITH A NOVEL PROCEDURE FOR THE TREATMENT OF FEMALE URINARY STRESS INCONTINENCE

Neuman Menahem

Urogynecology, Dept. of Gynecology, Shaare Zedek Medical Center, Jerusalem, Ben-Gurion
University of the Negev, Israel

Objectives: To evaluate the first 180 TVT-Obturator(1) patients' series preliminary data regarding the urinary incontinence cure rate, intra and postoperative complications rate and surgeon's learning curve. **Methods:** A total of 180 patients with urodynamically proven USI had the TVT-Obturator operations. The patients were followed up for 2 to 16 months for subjective and objective cure as well as for treatment complications.

Results: The TVT-Obturator procedure does not require bladder catheterization neither intra-operative diagnostic cystoscopy. Operative complications, such as bleeding or visceral injury, were not recorded. Two patients were diagnosed with postoperative voiding difficulties: one had complete outlet obstruction and was treated successfully by tape tension loosening at theatre on the postoperative day while the second was partial obstruction and responded well to self catheterization for two weeks. No infective nor hemorrhagic complications and no tape protrusion to vagina or urethra were recorded. Cured were 151 (84%) patients, 16 (9%) patients had minimal residual urinary stress leak and 13 (7%) patient were diagnosed with therapeutic failure. Three of the TVT Obturator failed patients had a following successful TVT operation on a three-month interval.

Discussion: The TVT-Obturator is a novel mid urethral sling, designed to cure female urinary stress incontinence and reduce the TVT well-known peri-operative complications. This series results agrees with previously reported efficacy, safety and simplicity of this procedure. However, long-term data is required prior to incorporating this operative technique to the armamentarium of anti-incontinence procedures. No typical surgeon's learning-curve complication reduction rate effect was noticed, but this might be due to former experience with the TVT procedure.

CHANGES IN THE VOIDING PHASE INDUCED BY SUB-URETHRAL TAPES (TVT[®] AND TVT-O[®]): COMPARISON AT SHORT FOLLOW-UP

PignéA.¹, Valentini F.², Nelson P.²

¹CEEG, Paris, ²U731 INSERM/UPMC, Ivry-sur-Seine, France

Objectives: Synthetic slings have become the preferred surgical method for treatment of stress urinary incontinence (SUI). Our purpose was to compare the changes in the voiding phase following the cure of stress incontinence with one of the 2 devices, TVT[®] and TVT-O[®].

Methods: Among 44 women with SUI complaint, 22 (mean 56.4 years) underwent a TVT[®] procedure and 22 (mean 54.8 years) a TVT-O[®] procedure. They had physical examination and urodynamic tests before surgery and at 1-month follow-up.

Modeled analysis of free uroflows was performed using the VBN[®] micturition model. A constrictive obstruction or a gaping of the urethra was characterized by the parameter g and a local compression by a parameter g . Any voiding depends on these 2 parameters and on circumstantial parameters.

Results: Maximum flow rate decreased significantly after surgery: TVT group: 35±10 vs 29±14 mL/s and TVT-O group: 33±13 vs 23±12 mL/s (while similar voided volumes). Maximum urethral closure pressure was not modified after surgery in the 2 groups. The shape of the flow curve was notably modified (prolonged flow time or polyphasic curve); abnormality of the flow pattern is more important after TVT-O, perhaps due to an irritative phenomenon.

Twenty one files (TVT group) and 16 (TVT-O group) fulfilled the criterion for good fitting of recorded and computed flow curves.

Before surgery, urethra was found only affected by a constrictive obstruction or a gaping. After surgery, g remained unchanged; an additional compression appeared in 18 TVT files (81.2%) ($g=11.0±6.7$ cmH₂O) and 12 TVT-O files (75.0%) ($g=15.2±10.1$ cmH₂O).

Conclusions: TVT and TVT-O tapes appear to have similar effects on the mechanics of the voiding phase. Modelling allows by simulation of pathophysiological hypothesis to identify and quantify the changes in the voiding phase induce by the tape. Urethral compression was more frequent in the TVT group while the magnitude of it is higher in the TVT-O group. The reasons for that difference could be the position and the direction of the tape. Long follow-up of TVT-O is in process.

THE IBEROAMERICAN CLINICAL STUDY OF A READJUSTABLE TRANSOBTURATOR SLING FOR THE TREATMENT OF FEMALE STRESS URINARY INCONTINENCE: 2-YEAR OUTCOME ANALYSIS

Palma P., Riccetto C., Dambros M., Thiel M., Herrmann V., Netto N.R., Jr,
Contreras C., Retto H., Colaço J., Castro Diaz D.

State University of Campinas, São Paulo, Brazil

Introduction and Objective: SAFYRE is a readjustable and minimally invasive sling for the treatment of stress urinary incontinence (SUI). Attempts to restore the normal suburethral hammock using an anatomical approach have been made in recent years. The transobturator approach allows for the anatomical reconstruction of the natural support of the urethra, and at the same time avoids scars at the retro pubic space in patients with previously failed procedures. We report our experience with this readjustable sling for the treatment of types II and III stress incontinence.

Methods: A total of 200 consecutive female patients with clinical and urodynamic diagnosis of SUI underwent transobturator Safyre sling procedure. The age range was from 40 to 71, mean age 61 years. One hundred and thirty patients (65%) presented previous failed anti-incontinence procedures. The procedure was performed with the patient in the lithotomy position and the same operative protocol in all cases, independently of the patient's size and weight, was used. The vaginal wall was dissected from the underlying periurethral fascia, bilaterally to the inferior ramus of the pubic bone. The path was made with a hook-like needle through skin, obturator membrane and muscles, around the ischiopubic ramus and finally out through the vaginal incision. The SAFYRE sling was hooked by the tip of the needle and brought to the previously made incision.

Results: At 6 months of postoperative period, 180 patients were continent and 20 reported some episodes of leaking of urine. The incontinent patients underwent readjustment of sling and eight patients became continent and four reported improvements of their symptoms after that procedure. At the end of the follow-up period (24 months), 182 women (92%) were cured, six reported improved of their symptoms and eight reported persistence of pre-operative complaints. Two patients presented sling infection after 1 month of implant and also two patients presented reduced sensitivity in the inner thigh that subsided spontaneously. Forty patients presented transient irritative voiding symptoms. No urinary retention, vascular or visceral injury occurred.

Conclusions: Transobturator SAFYRE demonstrated to be safe and easily performed. The unique feature of readjustability along with the good initial results, make this procedure an attractive alternative in the management of SUI.

TRIPLE OPERATION FOR PROLAPSE USING PROSTHESES IN THE CONSERVATIVE AND RECONSTRUCTIVE SURGERY OF PELVIC DEFECTS

De Vita D., Santinelli G., Auriemma G.

Department of Obstetrics and Gynaecology, St. Francesco D'Assisi Hospital, Oliveto Citra (Salerno), Italy

Objectives: To assess the efficacy of triple operation for prolapse using prosthesis (TOPP) with transobturator under bladder (trigonal level) associated with infracoccygeal sacropexy in the conservative and reconstructive surgery in anterior, central and posterior pelvic floor defects. The TOPP is performed using the principles of tension-free surgical correction.

Methods: From April 2003 to December 2004 cystocele and uterine prolapse prosthesis correction with transobturator obtape were performed in 52 patients with different degrees of uterus-vaginal prolapse. The patients were included in two groups: group 1 includes the patients with utero-vaginal prolapse II stage (POP-Q score), submitted to conservative prostheses correction with transobturator obtape associated to infracoccygeal sacropexy (TOPP), group 2 include the prolapses stage III-IV, submitted to hysterectomy and TOPP. In all 52 patients were used obtape sling with polypropilene mesh in anterior wall; while polypropilene sling (posterior-IVS) in all patients and biological mesh (Surgisis) in 24 patients in posterior wall were used. Surgical technique include transobturator obtape position under bladder (trigonal level). Polypropilene mesh, fixed in top-side to obtape by two absorbable sutures and in under-side to anterior side of cervix. The tape was secured to uterus-sacral ligament with absorbable sutures, to suspend uterus. Biological mesh were used in 24 patients to correct severe rectocele, the mesh were fixed in the top to posterior IVS sling and below to perineal body. In the group 2 include the patients with uterus-vaginal prolaps (3th-4th) submitted to TOPP, after vaginal hysterectomy. This operatory technique is the same as the previous operations, with the only difference being the vaginal hysterectomy for 3-4 th degree of prolapse.

Results and conclusions: No intraoperative, visceral perforations and vascular damage, were observed. Bleeding >2 gr/dl; 7 cases (3.6%), without transfusion, were observed. The follow-up was since 23 to 4 months. Two recurrences (1.04%) of vaginal defects was observed in two patients (3 and 5 months). Only 3 vaginal erosion (1.5 %) 2 in the I group and one in the II group of vesicovaginal vesico-vaginal prosthesis through the anterior colpotomy, after six months. Five exposure (2.6%) of mesh in the vesico-vaginal prosthesis through the anterior colpotomy, treated by simple partial excision of the exposed area under local anaesthesia.

EPIDEMIOLOGY RISK FACTORS OF PELVIC FLOOR DYSFUNCTIONS

Arbona J.C., Berra G., Daguerre P., Sarrouf J.

U.N Cuyo (National University of Cuyo), Faculty of Medicine, Clinical Gynecology Area, and Gynecology Services of Hospital Luis C. Lagomaggiore. Mendoza City, Republic of Argentina

Aim: to analyze individual and obstetric epidemiologic risk factors related to Pelvic Floor Dysfunctions (PFD).

Material and methods: the study was carried out on 356 patients registered in the urogynecology section, Gynecology Services, of our data base, from 04/01/02 until 06/30/05. The variables parity, forceps, new born weight and BMI>29 were analyzed, and related to the clinic prevalence of pelvic floor (genital dystopia, extrinsic SUI, UI (urge incontinence) and anal incontinence). Statistical design: descriptive, retrospective, cases/checkup with association of variables of qualitative independent samples by contingency tables (Chi-squared test and Fisher's exact test).

Results: Patients' age: 0=60 (± 22). A sampling of nulliparous women and women with deliveries was taken, and their relation to PFD ($p < 0.0001$ – OR: 11). Between <2 deliveries (22%), and >2 deliveries (multiparous) (75%) [$p = 0.0009$ – OR: 2.5; Prolapsus: OR: 4; SUI: 2.3; UI: 3.3; Anal incontinence: 3.1] newly born weight >4000 for PFD women ($p = 0.0001$ – OR: 5.3). Forceps delivery: 38 (9%) and their relation to PFD was clearly significant: $p = 0.0001$ – OR: 17.6. BMI > 29 and PFD $p = 0.0001$ – OR: 3.18.

Conclusions: This study shows how significantly important the individual and obstetric analyzed events (parity, forceps, overweight, newly born weight) seem to be, as risk factors on the incidence of pelvic floor dysfunctions.

VIDEO PRESENTATION: PROLAPSUS OF REMAINING CERVICAL STUMP. CASE REPORT

Arbona J.C., Sarrouf J.R.

Hospital Luis C. Lagomaggiore. Gynecology Services. Urogynecology Section. Mendoza. Argentina

Aim: To communicate a repair technique for the correction of remaining cervical stump prolapsus.

Patient and Method: The case is reported due to its uncommonness on a 46 year old patient, who had underwent a subtotal hysterectomy on a benign pathology of the uterine body. An cervical promontofixation technique was used. However, in this case, this technique was applied by interposing a 3 x 2 cm polypropylene mesh (Prolene), which could be omitted by proceeding to the direct fixing of the uterine cervix to the promontory sacrum with separate stitches of unabsorbable material.

Discussion: After a subtotal hysterectomy, the remaining stump prolapse is generally eight times less frequent than the vault vaginal prolapse. The reason for this fact is that this hysterectomy technique is not frequently used nowadays, as the fixing facial elements, from the pelvis to the uterine isthmus and cervix, remain unharmed and this procedure is performed on young patients.

Conclusion: We believe that the reduction technique for the prolapse of the remaining cervical stump via abdomen (cervical promontofixation) with or without polypropylene mesh and rectocele correction via vagina is a marked solution to this infrequent dystopia, which is also very difficult to be resolved via vagina. This is so mainly because in 3rd and 4th grade prolapses, the ureters lower down next to the uterine neck, carrying along the risk of ureteral injury. The suggested technique minimizes this problem, by elevating, via abdomen, the cervical stump, which lengthens and stabilizes the vagina, as it carries along with itself all the elements of the retinaculum uteri towards the sacral promontorium.

LAPAROSCOPIC TREATMENT OF RECTAL PROLAPSE

González FX., Bravo R., Lacima G., Bollo J., Lacy A.
Carmona F.*, Puig-Clota M.*, España M.*

General Surgery and Digestive Motility Unit. Institut de Malalties Digestives. Urogynecological Unit*,
Hospital Clínic de Barcelona. Spain

The use of minimally invasive abdominal surgery may be applied in patients with rectal prolapse who would otherwise be candidates for perineal techniques.

Objective: To report our experience in laparoscopic treatment of rectal prolapse in the Hospital Clínic de Barcelona.

Patients and Method: From 1998 to 2005, we prospectively operated 15 consecutive female patients with complete rectal prolapse by laparoscopic procedure.

The mean age was 64 years (range 35-87 years). All patients received abdominal rectopexy (13 patients fixed by sutures and 2 patients a mesh was used). In 6 patients sigmoidectomy was also performed because of the presentation of redundant long sigma or preoperative constipation.

Results: There were no intraoperative complications or need for converting to open surgery. The mean operative time was 165 minutes (125 -220) and the mean hospital stay was 5.1 days (range 3 -16). Early postoperative complications were: self-limiting rectal bleeding, one intestinal occlusion due to trocar hernia and urinary infection. Late complications included: one evisceration of one trocar and severe constipation leading to the removal of the mesh by laparoscopy. No recurrences occurred during the median follow-up of 35 months (range 83 -1), and only two patients presented anal mucosal prolapse (6 and 12 months after surgery). Concerning continence the Wexner score improved: from 12.2 preoperatively to 6.3 postoperatively.

Conclusions: Laparoscopic treatment was a feasible, safe and effective technique for complete rectal prolapse in our patients.

DIRECT OR OVERLAPPING PRIMARY ANAL SPHINCTER REPAIR? A SYSTEMATIC REVIEW OF CLINICAL TRIALS AND META-ANALYSES

Lustosa S.A.S., Matos D., Saad S.S., Salum M.R.

Universidade Federal de Sao Paulo, Escola Paulista de Medicina
UNIFOA Centro Universitário de Volta Redonda, RJ, Brazil

Introduction: Two methods for the surgical treatment of sphincter injuries are the end-to-end and the overlapping repair. At present there is no consensual approach among surgeons worldwide and, in the UK, about half of the consultants used the end-to-end method and the other half used the overlapping method. The aim of this review is to compare the effectiveness of these surgical procedures. **METHODS** - A systematic review of the literature and meta-analyses were made. MEDLINE, LILACS and COCHRANE LIBRARY were searched up to August 2005. Identification of the studies, data extraction and methodological quality assessment have been made by two independent reviewers (SASL/DM. The meta-analyses were performed (Review Manager 4.2) using Peto Odds Ratio (fixed effect model) as default. The outcome measures studied were: physical examination, fecal incontinence, endoanal ultrasonography and anal manometry.

Results: Four randomized clinical trials were selected. From 228 patients enrolled, 117 were allocated to endo-to-end and 111 were allocated to overlapping sphincter repair. The meta-analysis of fecal incontinence results showed that 20 (20%) of 100 patients in group end-to-end compared to 13 (13%) of 100 patients in group overlap developed some degree of incontinence (Peto OR 0,55, 95% CI:0,25-1,22, p=0,14, non-significant). The meta-analysis of endoanal ultrasonography results showed that 43 (59,7%) of 72 patients in group end-to-end compared to 35 (53,0%) of 66 patients in group overlap developed some degree of incontinence (Peto OR 0,65, 95% CI:0,31-1,37, p=0,26, non-significant). Physical examination and anal manometry results could not be included in the meta-analysis.

Conclusion: The outcome is similar whether direct end-to-end or overlapping repair of a sphincter anal defect is performed.

OVERLAPPING SPHINCTER REPAIR FOR ACQUIRED ANAL INCONTINENCE

Matos D., Saad S.S., Salum M.R., Lustosa S.A.S.

Gastroenterological Surgical Department, UNIFESP-Escola Paulista de Medicina, São Paulo, Brazil

Introduction: The overlapping sphincter anal repair is shown in this video presentation, emphasizing the main aspects of the surgical procedure.

Methods: The case of one 28-year-old patient with severe fecal incontinence due to a anterior fourth-degree obstetric tear of the anorectal sphincter is presented. Ultra-sonographic scanner was used with both sphincter layers carefully imaged; anorectal manometry was made by using an eight-channel, water-perfused catheter and pudendal nerve latency was determined. Following full mechanical bowel preparation and prophylactic administration of antibiotics, the patient was submitted to a primary overlapping repair of the anal sphincter of about 2 cm. Through an anterior curvilinear incision between the anus and vagina and the total mobilization of the anoderma from the underlying scars and external sphincters cephalad to the anorectal ring, the dissection was completed. Care was taken no to damage branches of the pudendal nerves in the posterolateral dissection. Scar tissue was preserved and cephalad puborectalis plication was made with interrupted sutures. No diverting stoma was used.

Results: The time of perineal healing was about five weeks. There was a significant improvement in the squeeze pressure and in the functional anal canal length postoperatively. At a follow-up of three years the patient has shown a very good anal continence and no use of laxative was required.

Conclusion: Thus for a successful anal sphincter repair, clear visualization of the muscle ends in its entirety is essential. Surgical and aseptic technique together with longer-lasting absorbable sutures are important keys to surgical success.

WHY IS NECESSARY AN INTERDISCIPLINARY APPROACH IN THE BOARDING OF VAGINISMUS AND DYSPAREUNIA?

Aliaga P.¹, Freundlich O.²

Human Sexuality Unit. Obstetrics & Gynaecology Department.

Clinical Hospital of University of Chile(1)

Clínica Las Condes (2). Santiago, Chile

Vaginismus constitutes the second cause of consultation in the area of Sexual Dysfunctions reported by the Unit of Human Sexuality and it has been defined as an involuntary spasm of the pelvic muscles, that fundamentally surround the external third of the vagina, specially the levator anus besides, it has to be considered the personal history and personality profile.

Objective: Demonstrate that Vaginismus and Dyspareunia needs an interdisciplinary treatment to be cure.

Methods: We analyze 75 patients from 16 to 43 years old on a period between year 2003 and 2005.

Results: The latency to consult is variable, from one year on attempt of beginning coital sexuality to 12 years, which orients towards an enormous difficulty to assume the problem and the little answer of the appropriate treatment that women find, which means a long way to find the professionals for a right treatment.

We found that Vaginismus appears as a primary cause, in 90% and 10% in a secondary cause, triggered by a severe Dyspareunia.

Some times the consultation cause, is the difficulty to become pregnant more than a sexual problem. The physical examination establishes the diagnosis and at the same time , constitutes a therapeutic space that allows us to verify the type of dysfunction , the degree of severity, and detects the existence of organic factors that contribute to the sexual dysfunction.

The four predisponentes factors we have found are: Traumatic experiences (repeated abuse and genital accidents), chronic infections which cause vulvodinia, the establishment of painful points trigger in the perineal muscles, and inflamatory processes like Bartolini glands inflamation.

The treatment consist in teaching anatomical normality, practice relaxation techniques, localiza, stretch and relax vaginal muscles, improve vaginal opening, reestablish vulvovaginal well-being, prescribe drugs to treat neuropathic pain and eliminate pain and fear during intercourse through psychological support.

The percentage of success is 100% in patients who finalized treatment

Conclusion: We have found so many different situations and causes of Vaginismus and Dyspareunia, that it meant to develop an interdisciplinary therapeutic approach as medical treatment, medications, pelvic floor physical therapy and psychological treatment.

THE VALUE OF DYNAMIC TRANSPERINEAL ULTRASOUND (DTPUS) VS ANORECTAL ULTRASOUND (ARUS) IN THE EVALUATION OF FECAL INCONTINENCE

Beer-Gabel M.*, Issa N.#, Assoulin Y.*, Mahor Y.*, Avidan B.*, Bar Meir S.*

* GI Institute Sheba Medical Center, Tel Hashomer and Sackler School of Medicine, Tel Aviv University

Surgical department , E. Wolfson Medical Center. Holon Tel Aviv University

Objectives: Fecal incontinence affects mainly the older female population .Trauma to the anal sphincter is the most frequent cause. Anal ultrasound (ARUS) is the gold standard method to examine the anus. It is an invasive procedure and uses a special rotary transducer. Dynamic Trans Perineal ultrasound (DTPUS) is non-invasive method. It evaluates the integrity and the function of the anus.We intended to evaluate the value of the PUS in a group of consecutive female patients suffering from fecal incontinence.

Material and methods: Between April 2004 and January 2005, 42 female patients were evaluated by clinical examination, ARUS and DTPUS. Correlation between ARUS and DTPUS regarding the measurements of the thickness of the anus and the presence of tears, was done by an independent observer.

Results: The median age was 57. The median number of childbirths was 2.1. Sixty nine % of the women had a history of difficult delivery or anal tear, 26% had a hysterectomy. The Wexner score for incontinence was 8.6. Forty two % had a normal pelvic examination.

The measurements of the anus thickness by ARUS and PUS were similar. There was no significant difference in both methods regarding the number and location of anal tears although there was some difference in the angulation of the anal tears.In 60% of the patients the DTPUS revealed additional findings which could influence the function of the perineum.

Conclusion: Although the numbers were small, PUS seems to be a good method to define the integrity of the anus. Even more, PUS gives information on the whole perineum which is not possible with the ARUS.

DIAGNOSIS OF CUL DE SAC HERNIA: DYNAMIC PROCTOGRAPHY (DP) OR DYNAMIC TRANSPERINEAL ULTRASOUND (DTPUS)?

Beer-Gabel M.*, Assoulin Y.*, Amitai M.**, Sarig Y.*, Bar Meir S.*

* GI Institute Sheba Medical Center, Tel Hashomer and Sackler School of Medicine, Tel Aviv University

** Imaging Department, Sheba Medical Center, Tel Hashomer and
Sackler School of Medicine, Tel Aviv University

Objectives: Enteroceles are internal hernias which are difficult to detect. Their symptoms are not specific. Most are missed by physical examination. They are usually diagnosed by DP and recently by dynamic magnetic resonance imaging. The aim of this study was to evaluate DTPUS in the diagnosis of enteroceles.

Methods: Sixty consecutive female patients with symptoms of anorectal outlet obstruction or fecal incontinence were examined. In all patients a digital examination was performed followed by DP and DTPUS.

Results: Seventeen out of 60 patients had an enterocele. The clinical examination was suggestive of enterocele in 3 out of 17 patients only. In 12 out of 17 cases hernia of the Douglas pouch were demonstrated by both techniques (DP and DTPUS). In 6/11 enteroceles there was a perfect agreement on their stage and content. 4/11 the PUS upgraded the stage of the existing enterocele demonstrated by DP (grade 2 for grade 1). In 2/11 patients PUS diagnosed an enterocele when the DP demonstrated a peritoneocele. Five of the enteroceles were diagnosed by only one of the modalities. In 3/17 PUS failed to show a "cul-d sac" herniation (2 enteroceles and one peritoneocele) that was diagnosed in DP. In 2/17 of the cases DTPUS demonstrated a "cul-d-sac" herniation (1 enterocele and one sigmoidocele) missed by DP.

Conclusion: Enteroceles may be diagnosed accurately with PUS. Compared with defecography PUS provides a better definition of the cul de sac hernia in terms of its content and stage and bears no radiation exposure.

POPQ AND SYMPTOMS 5-14 YEARS AFTER VAGINAL SACRO-SPINOUS FIXATION

Aigmuller Th., Dungal A., Hinterholzer S., Riss P.

Department of Gyn./Obstetrics, Thermenklinikum Moedling / Vienna, Austria

Objective: To determine the long term anatomic results and quality of life in patients after vaginal sacrospinous fixation (SSF).

Patients and Methods: From 1990 through 2000 we performed 81 SSF for vault prolapse (mean age 64 years, range 50 – 83 years). In 2005 we invited all patients to a follow up examination. 12 patients had died of causes unrelated to SSF, 24 could not be reached, 6 patients only returned the questionnaire. A total of 39 patients (mean age 70 years, range 58 – 84) could be examined clinically (POPQ) and were given the Queensland Pelvic Floor Questionnaire. Median follow-up time was 8,5 years (51 – 178 month).

Anatomic recurrence was defined as point Ba, Bp or D >0, corresponding to 2nd or 3rd degree cystocele, rectocele or vault prolapse. Symptomatic recurrence was defined as the presence of at least one symptom of LUTS, defecation disorder, sensation of prolapse or sexual dysfunction, with a frequency of at least once a week.

Results:

No anatomic recurrence	27 / 39	No symptoms	5 / 39
Anatomic recurrence	12 / 39	LUTS	29 / 39
Cystocele 10, Rectocele 2, Vault prolapse 0		Defecation disorders	17 / 39
		Sensation of descent	5 / 39
		Sexual dysfunction	8 / 20

Summary and Conclusions:

The most common site of anatomic recurrence after 5 years was the anterior compartment (26%). The most common complaints at long term follow up were lower urinary tract symptoms (74%). These symptoms had a negative impact on QOL in only 50%, and may not have been related to the original surgery. Symptoms of descent were reported by 13% of patients. Vaginal sacro-spinous fixation is an established operation which offers good long-term results.

VAGINAL SACRO-SPINOUS FIXATION AND LONG-TERM SEXUAL FUNCTION

Dungl A., Aigmueller Th., Bauer H., Riss P.

Department of Gyn./Obstetrics, Thermenklinikum Moedling, Vienna

Objective: To evaluate sexual function and well being after vaginal sacro-spinous fixation (SSF) for vault prolapse

Patients and Methods: From 1990 through 2003 we performed 99 SSF for vault prolapse (mean age 62 years, range 50 – 83 years). 2 to 15 years after surgery we invited all patients to a follow up examination. 12 patients had died of causes unrelated to SSF, 25 could not be reached, 62 patients returned a quality of life (QOL) questionnaire and 55 patients also could be examined clinically (POPQ). Median follow-up time was 7 years.

We used the Queensland Pelvic Floor Questionnaire which contains 12 questions concerning sexual function and patients' satisfaction.

Results: 22/62 patients (35%) were sexually active (mean age at follow-up 62 years, range 55 – 81 years). Frequency of intercourse was less than once a week in 14 patients. 8/22 patients reported symptoms of sexual dysfunction: pain (6), no vaginal sensation during intercourse (3), inability to contract the pelvic floor (2), sensation of stenosis of the vagina (2). The latter could not be confirmed on vaginal examination.

The reasons given for the avoidance of intercourse in 40 patients were: lack of a partner (31), erectile dysfunction of the partner (3), pain (1), and urinary incontinence (1). On the other hand 4/40 patients expressed interest in sexual activity, of whom one had orgasms during sleep.

Conclusions: Only one third of patients were sexually active at long term follow-up after SSF, and one third of patients did not have a male partner. Frequency of intercourse was low. The most common complaints were pain during intercourse and lack of vaginal sensation.

NEUROPHYSIOLOGIC ASSESMENT IN URINARY INCONTINENCE

Bogacz D.*, Bogacz A.*, Cura G.°

* Clínica Electro - Dr. Jaime Bogacz, ° Servicio de Sanidad de las FF. AA., Montevideo, Uruguay

Objective: Urinary incontinence affects at least 14% of women older than 30 years and 34-49% of those older than 65 years. Anatomic disturbances and their consequences on the vesico-urethral union have been studied. However, there could be an association with disturbances of the central and/or peripheral motor pathways. Transcranial magnetic stimulation (TMS) in association with the EMG is a painless tool, which could provide objective information to the physician.

Methods: 56 patients with urinary incontinence (28-82 years) were studied.

Results:

A) 50 patients showed central disturbances (prolongation of the central motor conduction time (CMCT), polyphasic cortical motor evoked potential (cMEP) or both). Patients with clinical pyramidal signs (19) had abnormal cMEP. On the other hand, 31 out of 37 patients with a normal neurological exam showed abnormal cMEP.

B) 51 patients showed peripheral disturbances (peripheral MCT, polyphasic motor units and fibrillation potentials). Patients with clinical signs (33) of peripheral motor involvement showed abnormal MEP, EMG or both. On the other hand, 16 out of 21 patients with normal neurological exam showed abnormal MEP, EMG or both.

C) In 47 patients an association of central and peripheral motor involvement was found.

D) In 2 patients no central or peripheral motor disturbance were observed. In those cases the incontinence was assumed to have been caused by local traumas.

Conclusions: The combination of TMS and the EMG of the perineal floor showed to be a well tolerated diagnostic method, which allowed a classification of patients regarding the presence or absence of central and /or peripheral motor involvement, even in those cases with a normal neurological exam. These findings could be important for a better therapeutic and prognostic evaluation.

LONG TERM RESULTS OF ANAL INCONTINENCE TREATMENT

Pavalkis D., Venclauskas L., Saladzinskas Z., Tamelis A.

Kaunas Medical University Hospital, Surgery department

Objective: Evaluate quality of life of patients after sphincteroplasty operations.**Methods:** A hospital database of 39 patients operated during 1999 – 2003 years were analyzed regarding age, sex, reason of incontinence, anorectal manometry and rectal ultrasonography data, type of operation. Patients were asked to fill questionnaire, made using Wexner scale, after operation more than 1 year. Responded 84,6 percents of patients.**Results:** Reasons for incontinence were obstetric trauma (13 patients), idiopathic incontinence (11 patients) and traumatic injury during anorectal operations (15 patients). Anorectal manometry before operation showed low IAS pressure (35,44+/-14,32) and low EAS pressure (66,07+/-24,95), low max tolerable volume (98,75+/-49,78). Ultrasonography before operation showed defect in IAS and EAS, or in some cases only thinned and scared sphincters. There were performed 39 operations under spinal anesthesia, comprising 30 isolated sphincteroplasties 9 sphincterolevatoroplasties.

Wexner scale of patients before operation was 13,14+/-4,37 (5 – 20), after operation 9,77+/- (0 – 19). The quality of life improved significantly in 45,7 percents of patients, others remained unchanged or improvement did not affected quality of life significantly.

We found differences of the outcome according to the reason for anal incontinence. In patients after obstetric trauma Wexner scale before operation was 13,33+/-4,89, after operation 8+/-3,33. Quality of life improved significantly in 66,7 percents.

In patients with idiopathic incontinence Wexner scale before operation was 14,75+/-4,26 (6 – 20), after operation 10,63+/-5,96 (0 – 18). Quality of life improved significantly only in 25 percents. In patients with posttraumatic and postsurgical anal incontinence Wexner scale before operation was 11,92+/-5,39 (5 – 18), after operation 11,2+/-6,3 (2 – 19). Quality of life improved significantly to 45 percents, mainly in patients after isolated mechanical (non surgical) sphincter trauma.

Conclusions: There are no strict criteria for thorough selection of the patients with anal incontinence for different type of surgery before operation using anorectal manometry or rectal ultrasonography. Patients with idiopathic incontinence must be suggested another type of treatment like sacral nerve stimulation or biofeedback.

TENSION-FREE VAGINAL MESH FIFTY-FIFTY IN SEVERE CYSTOCELE REPAIR: PILOT STUDY

Dati S., Palma D., Cinque B.

Urogynecology Unit , Dept. Gynaecology & Obstetrics, Policlinico Casilino Hospital, Rome, Italy

Objective: Assessment of the double transobturator access implantation of tension-free combined (biological/synthetic) vaginal mesh in surgical repair of severe prolapse in the anterior vaginal wall. The use of fifty-fifty prosthetic material allows to combine the benefits of the biological material's tolerance with the resistance of the synthetic one, minimizing risks of erosion/rejection of the former (7.5%-13%) and retraction/displacement of the latter (12.9%- 18.5%).

Materials and methods: The study (September 2004 - June 2005) involved a selected group of 30 patients (28 menopause) affected by severe uterovaginal prolapse (mean age 64.4 ± 10). They underwent pre-operative work-up: ICS POP-Q score (in 28 patients stage III mean point Ba + 2.9 cm and in 2 stage IV Ba + 3.3 cm), Q-Tip test, stress test (12 clinical SUI, 11 occult and 7 potential), urodynamic testing (17/30 suffered from OAB, 16/30 obstruction - Blaivas-Groutz nomogram), VAS in subjective prolapse disturbances (7.7), Wexner score (<5 and negative ODS), UDI-6 (8.7), IIQ-7 (7.8), PISQ-12 (mean score 18 in 10 sexually active patients). All patients underwent cystocele repair: they were implanted a central biological bovine pericardial mesh (6 x 8 cm) where 4 monofilament macroporous prolene wings (1.5 x 15 cm) had been previously inserted at 0.5 cm from the margins through 4 buttonholes and then covered like an "envelope" by the edges of the central body and fixed on the mesh with Monocryl 00. Only the biological material was in contact with the ATFP. The tension-free prosthesis remained stable in place exploiting the "velcro" effect of the synthetic material. All patients underwent associated vaginal hysterectomy, infracoccygeal sacropexy and TVT-O in clinical/occult SUI. No operative complications occurred.

Results: After a mean 6 month follow-up post-operative POP-Q mean Ba - 2.6 cm showed a high surgical-anatomical outcome (93.3%): only 2 recurrent asymptomatic cystoceles after 6 months and absence of recurrence/erosion/infection. VAS: 0.9; UDI-6: 2.8; IIQ-7: 1.6; PISQ-12: 29. We observed remarkable enhancement of irritative symptoms; only 2 "de novo" urgency, 14/16 non obstructed.

Conclusions: The pilot study is very encouraging, although a long-term follow-up and a wider survey are necessary to get further evidence of its lasting efficacy.

POSTERIOR TIBIAL NEUROMODULATION (PTNM) IN THE TREATMENT OF OVERACTIVE BLADDER (OAB)

Vicente E., Hannaoui N., Gonzalez J.L., Peña J.A., Prats J., Garcia D., Prera A., Abad C.

Urology Dept. Parc Taulí Hospital, Sabadell, Barcelona, Spain

Objective: To evaluate the efficacy of posterior tibial neuromodulation in the treatment of overactive bladder refractory to pharmacological treatment.

Methods: This is a cohort study that included 25 patients with a OAB symptomatology and/or pelvic pain/discomfort. All of them (but in one for whom it was contraindicated) previously received different pharmacologic approaches with poor symptomatic relief.

A SANS device was used in a weekly regimen (30 min/session) for a total period of 5-14 wks (M: 8.75 wks). This device generates an impulse of 9 Volt, 20 Hz, 200 ms, 0-9 mA

Symptomatic evaluation includes 2 frequency/volume charts and a symptom questionnaire (before and after treatment) and a urodynamic study before treatment.

A good response to treatment was considered if the number of voidings, urgency or urge-incontinence episodes, nocturia or pain intensity reduction was accompanied with a subjective self-perception of improvement.

Results: All patients were involved in this treatment because of the lack of response to a pharmacologic approach (in one case because of a contraindication to drug treatment) and a deep impact in their quality of life. The main indication (24/25 pts) was a OAB confirmed in the urodynamic study (20 patients). There were no side effects nor complications in any case. This treatment has been well tolerated but 2 patients decided to discontinue participation (in the 2nd and 5th session respectively). Of those who completed the treatment 18/23 (78.26 %) a significant symptomatic relief was achieved. 6 of 23 pts (26%) considered themselves cured. The non-responders were 5/23 (21.74%).

Conclusions: OAB syndrome causes a deep impact in the quality of life. Standard therapies (pharmacological or behavioral) fail frequently because they are badly tolerated or are quite time-consuming. PTNM is a safe, effective and relatively inexpensive option in the management of this symptom which causes such a significant cost to healthcare systems. Although sacral nerve stimulation is another option it is more invasive, expensive and requires a surgical procedure.

ILEAL ORTHOTOPIC NEOBLADDER IN FEMALE: FUNCTIONAL RESULTS

Andretta E.¹, Sangiorgio A.², Mazzariol C.³, Pastorello M.⁴, Garbeglio A.², Ostardo E.²

Urology Units of Dolo¹, Pordenone², Venezia³, Negrar⁴

Introduction: We report functional results in ileal orthotopic neobladder (ION) in women. Data were obtained through a questionnaire sent to 4 Urology Units.

Materials and Methods: In January 2005 a questionnaire was sent to 10 Urology Units in North-East Italy and 4 centres answered. From January 1997 to July 2005, 23 women, mean age 62 years (45-67) underwent radical cystectomy and ION. Indications were organ-confined bladder cancer (far from the bladder neck) in 22 and relapsing vesico-vaginal fistula in 1. The ION performed was the Paduan Ileal Neobladder (VIP) in 12 cases and ION according to Studer in 11 women. 21/23 patients are evaluable (1 lost at follow-up, 1 died 7 months post-op. for neoplastic progression) with follow-up range 6-104 mos (mean 47).

Results: ION capacity ranges 50-650 ml (mean 350). Two patients need 1-2 clean self intermittent catheterism/day (CIC) and 5 need 3-4 CIC/day (one patient with urinary retention-UR). 12/21 women complain daytime urinary incontinence (UI)-6 use 1 pad/day, 2 need 2-3 pads/day and 4 need >4 pads/day-while 13 report nocturnal UI (some drops in 1, 1 pad/night in 8 and >2 pads/night in 4). Totally 5 patients have a normal ION function-6 micturitions/day without UI or UR, 9 are incontinent, 4 suffer UR and 3 present both UR and UI. In 1 case UR is due to angulation of the posterior pouch-urethral junction and depends on the pouch falling back in the wide pelvic cavity. Another UR depends on ION herniation in wide laparocoele during micturition. One woman with severe stress-UI underwent trans-otturatory uretropexy becoming continent. In ION according to Studer, UI is detected more often than in VIP. All patients are neoplasm-free with normal upper urinary tract. Defecation is regular in 15 cases while 6 patients report constipation. Eight women have sexual intercourses with vaginal lubrication and orgasm. Sixteen women report normal vaginal sensitivity. Pre-surgery evaluation of vaginal profile was performed in 9 cases and pre-surgery urodynamic examination was done in 12 cases. 8/21 women didn't undergo any functional evaluation before surgery and 1 needs 4 CIC /day, 5 have severe UI and 2 present both UI and RU. 12 women are satisfied and 9 are not (6 UI socially remarkable, 1 UR and 2 both UR and UI).

Discussion: RU is more common in female than in male with ION and the cause may be mechanical. In our experience urethro-ileal junction angulation has been detected in 2 cases, but the obstruction was present in 1. The cause of UR is unknown in 5 women but urethral denervation is suspected. Daytime UI has been detected in 57%: it is mild/moderate in 6 and severe in 6. Nocturnal UI is more common and regards 13 women. We observed the worse results in 8 women which didn't undergo urogynaecological and urodynamic evaluation before surgery.

Conclusions: ION is becoming the first choice option also for women. 57% of our patients are satisfied with the procedure. The positive impact on body image, together with conservation of sexual function observed in 8/21 patients compensates possible voiding disorders. Mechanical obstruction explains 2/7 case of RU in our series. ION in women should be performed after urogynaecological and urodynamic evaluation in order to detect and treat fascial defects.

EPIDEMIOLOGICAL AND PHYSIOPATHOLOGICAL ASPECTS ABOUT INTERSTITIAL CYSTITIS IN THE POPULATION OF NORTH-EASTERN ITALY

Ostardo E.[°], Sangiorgio A.[°], De Antoni P.*[°], Dominese A.[°], Garbeglio A.[°]

[°] Department of Urology, Pordenone, * Unit of Urology, Gemona

Aim of study: The study considered a group of subjects (January 2003 - September 2004) presenting painful pelvic symptomatology defined according to ICS standardisation (2002). Aim of the study was to evaluate under a clinical and physiopathological aspects a group of patients never diagnosed before and never treated specifically for chronic pelvic pain. Patients were submitted to examinations which lead to the diagnosis of interstitial cystitis (IC) under the histological profile and according to NIDDK criteria.

Results and discussion: The subjects affected by IC (n. 23) were in total 20/00 over a population of 805.038 inhabitants as reported by other Authors who described an incidence of 0.66/100.000/yr for males and 1.2/100.000/yr for females. The mean age of the female subgroup (17) was 53 yrs while in the male subgroup(6) was 48 yrs (3:1 rate). Symptoms had been lasting 7 yrs to diagnosis (1-33). All previous examinations were negative for infective, neoplastic, malformative or structural pathologies in the urinary tract as well as the intestinal and genital system in the pelvic area. The onset of the disease began in 69% with lower urinary tract symptoms (LUTS), bladder pain in 56% or vestibulitis in 26% of cases. Trigger or tender points reproduced the usual pain on the genital area (26%) or on bladder/urethra (34%) and on the muscular pelvic floor (87%). Urodynamics showed normal bladder compliance (mean 61.29 ml/cmH₂O), bladder capacity(mean 365ml), while symptomatic detrusor overactivity was found in 13 subjects(56.5%) with mean p det = 30.5cmH₂O at a mean infusion volume of 264.5ml. The bladder pain was reproduced in all patients at a mean volume of 111.15 ml (70-130 ml). Thirteen subjects (56.5%) presented sphincter overactivity (EMG) during the void phase and detrusor hypocontractility was present in 18 cases(78.2%) corresponding to a residual volume found in 17 cases (74%) that is 27.7% of the cystometric capacity (mean 101.1 ml). A pudendal nerve dysfunction (increased and asymmetric terminal motor latency) were correlated in 85% of cases to detrusor hypocontractility. In all patients with a neurogenic lesion found at evoked sacral potential testing (sacral reflex increased in 9 cases, 30.4%), the abnormality was correlated to the detrusor-sphincter dyssinergia and to bladder pain.

Conclusions: The IC-syndrome shows different clinical pictures and itself represents an heterogeneous pathology. In males, the most frequent presentation (83%) is isolated pelvic pain (5), while in females the main clinical picture (88%) is LUTS (15). Men come to specialized clinical observation before women. The spastic myalgia of levator ani, found in 87%, seems to be the common finding contributing to the chronic pelvic pain even if the muscular pelvic floor is hypoactive. These data underline the importance of anatomical structures involved and surrounding the lower urinary tract.

NEUROPHYSIOPATHOLOGICAL STUDY OF THE PELVIC FLOOR IN PATIENTS WITH INTERSTITIAL CYSTITIS

Ostardo E., Sangiorgio A., Dominese A., Garbeglio A.

Dep. Of Urology, City Hospital, Pordenone, Italy

Aim of study: The main clinical aspects in patients affected by interstitial cystitis (IC) are painful symptoms, referred to the lower urinary tract, to other pelvic organs and perineal area. The aim of the research was to consider the neurophysiological testing applied to pelvic floor musculature in a group of subjects with IC.

Materials and methods: Twenty-three patients were studied (17 women–6 men), with mean age 51 yrs. The mean lasting of symptoms to the diagnosis completed was 7 yrs and all patients showed a history of chronic pelvic pain and painful bladder syndrome. We performed the pudendal nerve terminal motor latency (PNTML), anal sphincter EMG (under resting condition, voluntary contraction and reflex contraction), evoked sacral potentials (ESP) through stimulation of the dorsal nerve of penis (or of clitoris) and recording at anal level. It was considered as reference the value of PNTML=2.0+/-0.2msec and the mean value of the sacral reflex latency was considered 32.7+/-3.8msec.

Results: The mean latency for the right pudendal nerve was 1.60 msec, for the left one was 1.83 msec. In 5 patients (21%) the signal was recorded only on one side (3 left, 2 right side), 2 subjects (8.6%) showed an increase of latency >2msec. The mean amplitude of potential was 0.40 mV (right nerve) and 0.43 mV (left nerve). The mean value of PNTML differed from 0.209 msec for the right nerve and from 0.17 for the left one; slight differences were found in the measurement of the reciprocal amplitudes. The mean latency of the sacral reflex was 31.32 msec and in 26.3% (6 subjects) this parameter was larger than 33msec. The potential of motor unit measured on EMG was 1.81 msec(resting), 2.65msec under reflex contraction and 2.81 msec under voluntary contraction. Under these last conditions, the potentials of motor unit were larger, faster and longer lasting if compared to the resting conditions. The sacral reflex seemed less involved and the major increase of latency correlated with the lasting of the symptoms (chronic pelvic pain>10yrs) and a dysfunctionally voiding.

Conclusions: Our data showed the involvement of the peripheral nervous system, even if with minor alterations of the functionality. The main dysfunctions were evident in the pelvic floor (pubo-coccygeal myalgia, sphincteric overactivity) which would lead to an inhibitory mechanism in the bladder (detrusor hypocontractility). The pelvic floor musculature dysfunction can induce bladder abnormalities through the afferent pathway and C-fibers (so-called neurogenic cystitis) producing pain as a symptom. Patients with IC must be evaluated also under the neurological profile, at least at the diagnosis time and the role of the peripheral nerves in maintaining pain must be considered in a therapeutic program.

COLPOSACROPEXIA WITH VYPRO MESH (POLYPROPYLENE/POLYGLACTIN 910 COMPOSITE) FOR GRADE III Y IV POP-Q GENITAL PROLAPSE CORRECTION

Braun H., Vargas D., Dell'Oro A., Arellano M., Pizarro J.
González F., Fernández M., Rojas I.

Obstetrics and Gynecology service, Dr. Sótero del Río Hospital

Introduction: Colposacropexia can be performed with a variety of materials. There are diverse synthetic mesh for vaginal suspension. Polypropylene mesh is a strong monofilament non absorbible, highly resistant to infections and is the most used mesh in gynecological surgery. Vypro is a newly developed mesh that combines polypropylene and polyglactin 910 fibers in equals parts forming a more flexible and partially reabsorbible mesh. Up to date there are 2 publications in the literature using vypro mesh in colposacropexia that report a success rate comparable to Polypropylene. The purpose of this study is to perform a descriptive review of the success and complications rates in prolapse colposacropexia surgery with vypro mesh.

Study design: This prospective study included 23 patients who underwent colposacropexia with vypro mesh between the months of June 2003 and October 2004 in our hospital. Total hysterectomy with or without anexectomy was performed in all patients. Colposacropexia was performed with a double vypro mesh fixed to the prevertebral ligament at the S1 level with two Prolene # 1 stitches and to the anterior and posterior vaginal wall with 4 Prolene # 2 stitches each side placed at least 2 cm. from the vaginal vault suture.

Results: All patients had POP-Q grade III - IV prolapse. Their average age was 56.5 years ranging from 37 to 72 years. The mean surgery time was of 186.2 min. The mean follow up was 17,3 months. 1 patient presented a mesh erosion, 1 presented incisional hernia and there was no infection. 4 patient developed urinary incontinence and one presented dyspareunia.

Discussion: Total Hysterectomy with Colposacropexia with Vypro mesh has a good success and its use for this type of surgery is safe with a good short time outcome. To validate these results it is necessary a larger prospective study.

**DESCRIPTIVE ANALYSIS OF THE ANATOMICAL REPAIRS OF
BOARDING TRANSOBTURATRIZ FOR THE CORRECTION
OF THE PREVIOUS COMPARTMENT IN STRESS URINARY
INCONTINENCE (OUR EXPERIENCE)**

Vilchez Acosta R.^{1,2}, Torres H.³, Calomite A.², Mosso F.²
Baldarena C.², Alberti D.², Stortini L.²

¹School of Medicine, University of Buenos Aires, 2da. Dep. of Human Anatomy Hospital
²Dr Diego E. Thompson, Service of Urology; ³Service of Gynecology, Section of Urogynecology
Buenos Aires City Autonoma, Argentina

COMPLICATIONS AFTER TENSION FREE MID URETHRAL SLING PROCEDURE FOR STRESS URINARY INCONTINENCE (TVT-TOT): DIAGNOSIS AND MANAGEMENT

Dell'Oro A., Braun H., Bustamante C.A., Pinochet R., Cabello J.M.

Hospital Dr. Sótero del Río, Unidad de Uroginecología, Santiago de Chile

Objective: The purpose of this study is to evaluate the complication rate and its management, of tension free mid urethra sling with Prolene mesh in women with genuine stress urinary incontinence (SUI) by retropubic (TVT) and transobturator (TOT) approach.

Methods: Between January 2000 and July 2005, 302 women (mean age 56.7 range 18- 78) with clinical diagnosis SUI confirmed by history, physical examination and urodynamic study underwent a self-made tension free midurethra sling with Prolene, mesh with Ulmsten technique (152 patients) and Delorme transobturator technique (150 patients) under spinal anaesthesia. Patients were evaluated prospectively with history and physical examination, non invasive uroflow study and post voiding volume. Flow/ pressure (F/P) study with the Blaivas nomogram, was performed when bladder outlet obstruction was suspected.

Results: The global complication rate was 10.9 %. Intraoperative complications: bladder perforation in 12 TVT and 2 TOT, dignosticated by cistoscopy and managed with foley catether for 3-5 days. Bledding more than 200 cc in 3 cases of TVT treated with vaginal compression; One para vesical heamatoma in a TVT patient diagnosticated by ultrasound resolved with conservative management. Early complications: Severe retropubic pain of unknown origin in 1 case of TVT needs opioids to resolve. Celulitis in the needle insertion site of 1 TOT patient treated with systemic Antibiotics. 5 Bladder outlet obstruction (3 TVT and 2 TOT) notice at the removal of the catether needed surgery for release the tension of the sling. Late complications: During the first year of follow up 5 BOU confirmed with F/P study treated by section of the sling (3 TOT and 2 TVT). Two out of 10 patients with BUO treated persists with SUI. Erosion of the vaginal wall with exposure of the mesh in 3 patients who needs surgical remove keeps continent

Conclusions: The complication rate of tension free mid and urethra sling is low 10.9 %. Bladder perforation and vascular complications more frequent in TVT procedures. Bladder outlet obstruction have similar rates in both techniques.

TVT®/TVT-SPARC®/TOT-SAFYRE®: COMPARISON OF A PERSONAL SEQUENCE OF VAGINAL SLING PROCEDURES

Kuschel S., Dost F., Werner M., Schuessler B.

Department of Obstetrics and Gynaecology, Lucerne, Switzerland

Objectives: It was the aim of this study to compare the safety, efficacy and changes in quality of life (QoL) of the three different types of vaginal sling procedures: TVT®, TVT-Sparc® and TOT-Safyre® and present results of the TOT-Safyre® sling with special emphasis on the safety of this composite mesh.

Methods: Between 1997 and 2004 patients with an urodynamically proven stress urinary incontinence (SUI) ± over-active-bladder (OAB) wet/dry ± a previous incontinence operation were enrolled in this prospective longitudinal observation study. N=34 received a TVT®, n=55 a Sparc® and n=67 a Safyre® in a single surgeon trial without any prior learning curve. QoL was assessed using the validated German version of the King's Health Questionnaire (KHQ) and the Patient Global Impression of Severity/Improvement (PGI) before and after surgery. Subjective cure: urinary leakage: entirely dry, no OAB and QoL "entirely happy" or "satisfied". Subjective improvement: urinary leakage: loss of drops, no OAB and QoL: "entirely happy", "satisfied" or "mainly satisfied".

Results: Subjective (subj.) cure was reached in 50%, 66%, 59% (non-significant = n.s.), subj. improvement in 87%, 96%, 93% of the TVT®, Sparc® and Safyre® patients respectively (n.s.). Subj. de-novo-urgency was detected in 0%, 2%, 5% and subj. de-novo-urge incontinence in 4%, 4% und 5% the TVT®, Sparc® and Safyre® respectively (n.s.). Besides minor complications like urinary tract infections there were 2/34 bladder perforations during the TVT, 2/56 during the Sparc and 0/56 during the Safyre® procedure. There was 1 case of bleeding with revision in the Sparc® group. 2 of the TVT®, 4 of the Sparc® and 1 of the Safyre® slings had to be removed because of urinary retention and an additional 3 of the Safyre® slings because of mesh erosion.

Conclusions: This study shows that the TOT-Safyre® procedure provides comparable results to the TVT®- or the Sparc® procedure. Nevertheless it was associated with a higher rate of mesh erosions.

ICSPLUS: AN EXTENSION OF VAGINAL POSTERIOR WALL PROLAPS STAGING

Kuschel S., Werner M., Najjari L., Bucher S., Schüssler B.

Department of Gynaecology and Obstetrics, Lucerne, Switzerland

Objectives: Vaginal wall prolaps staging is internationally performed according to the prolaps staging system of the International Continence Society (ICS). The maximal extent of prolaps is recorded with the patient pushing. Regarding posterior vaginal wall (PVW) prolaps staging there may be differences in the extent of the prolaps dependent on rectal filling that might not be recorded with the patient pushing. It was the aim of the study to digitally rectally mobilize the PVW, measure the extent of mobilisation, stage it according to the ICS system and compare it with the commonly used ICS system.

Methods: 59 patients were included in this prospective study. Vaginal prolaps staging was performed according to the ICS criteria. Then the PVW was digitally rectally mobilized. The extent of mobilisation was metrically documented in a three dimensional system: (a) was the extent of mobilisation towards the ventral, (b) towards the examiner and (c) towards the lateral. The mobilized PVW prolaps was then staged again and named ICSplus. Interexaminer reproducibility of ICSplus was tested on 26 patients by two different independent examiners.

Results: Interexaminer reproducibility of ICS showed a high agreement. The lengths of the distances (a), (b), (c) were 1.45 ± 0.87 (0-3), 1.78 ± 1.06 (0-5) cm and 1.36 ± 0.66 cm (0-3) respectively (mean \pm SD (Range)). A statistically significant discrepancy of $\geq 1^\circ$ between ICS and ICSplus was found in 87% of all patients ($p < 0,001$). According to the ICS classification the numbers of the PVW prolaps 0°, I°, II°, III°, IV° was 23.7%, 15.3%, 45.8%, 15.3%, 0% respectively whereas ICSplus accounted to 5.1%, 11.9%, 37.3%, 45.8%, 0% respectively.

Conclusions: Regarding PVW prolaps staging ICS and ICSplus differ significantly. Therefore ICSplus appears to be a necessary extension of the ICS prolaps staging.

RATIONAL BASES OF THE COLPOSUSPENSION AT THE SACROCIATIC MINOR LIGAMENT

Mariconde J., Gallardo G., Jáuregui E., Donati V., Moya Encinas N.

Catedra de Anatomia Normal, Facultad de Ciencias Medicas, Universidad Nacional de Cordoba, Argentina

Objectivs: to evaluate the anatomics relationship of the sacrociatic ligament. The colposuspention to the sacrociatic ligament is one of the alternatives to correct or to prevent the vaginal prolapse.

Methods: twenty feminal formolized pelvis were dissected by the classical technique. We measured the ligaments distanced to the pudendus internal arteriae and nerve as well to the ciatic nerve.

Results:

Length of ligament sacrociatic minor		
Maximum 46,1 mm	Minimum 39,2 mm	Rate 42,6 mm
Distance to the pudendus internal packet		
Maximum 2,6 mm	Minimum 0,8 mm	Rate 1,7 mm
Distance to the ciatic nerve		
Maximum 29,3 mm	Minimum 21,4mm	Rate 25,3 mm

Conclusions: if the stitch is placed nearby the ciatic spine or in the superior-lateral limit of the ligament, there is a high possibility of a vascular damage to the inferior gluteal and the pudendal vessels. The damages rates are very variable in the literature. The ciatic nerve place 2.17 cm lateral at the ciatic spine. The more relevant risk of surgical damage is to the pudendal vessels and to the pudendal nerve. the risk of this surgery should be taken in cases of severe and iterative prolapses. We sugest the profilactic use of this technic only at the right side, because of the vascular and intestinal damages. The perfect knowledge of the ligaments anatomy takes to lower risk of quirurgical complication.

PARCIAL COLPECTOMY: A SURGICAL ALTERNATIVE IN ELDERLY PATIENTS WITH SEVERE DEFECT IN APICAL SEGMENT

Descouvieres C., Cohen D., Osorio R., Acevedo C., Riveros L., López J.

Hospital Clínico FACH, Clínica Alemana

Introduction: There are several techniques described for surgical reparation of genital prolapse with apical defect, they are specially focused to preserve sexual function. In elderly patients without sexual activity, is posible to replace those procedures with a parcial colpectomy. We present our experience with this approach.

Methods: Retrospective study evaluating 23 patients with genital prolapse including severe apical defect, and treated with parcial colpectomy by vaginal approach between years 1999 and 2005. Patients were clinically evaluated and urodynamic study was performed only in cases in which was considered necessary. Patients were operated by two surgical teams and was considered as inclusion criteria the necessity to repair the apical segment. Anatomical and functional results were evaluated.

Results: Average age was 77 years, and parity 4. Average BMI was 26. 100% of the patients were classified as genital prolapse grades 3 or 4 under Baden and Walker classification: 4 cystoceles, 3 vaginal eversions and 16 uterine procidentias. The symptom that motivated consultation was vulvar mass in every patient, urinary incontinence in 48% and voiding symptoms in 22%. Each surgery considered vaginal approach, hysterectomy was performed when indicated, culdoplasty, and anterior and posterior segment fascia repair. Surgery was complemented with parcial colpectomy instead of apical repair. 100% of the patients refered having no sexual activity and accepted losing this vaginal function after surgery. Procedures were done without intraoperative complications. Surgical average time was 107 minutes and blood loss aproximately 153 ml. Average hospital stay was 4 days and foley catéter one day. One patient evolutionated with neuromopathy and another presented a vaginal haematoma, both successfully recovered with medical treatment. Average follow up was 22 months, at that time every patient was asymthomatic.

Conclusion: Parcial colpectomy technique demonstrated to be a safe procedure, with excellent anatomic and functional results until middle term follow up, indicated in elderly patients with severe genital prolapse with apical segment defect.

EXPERIENCE WITH TRANSOBTURATOR VAGINAL TAPE INSIDE-OUT FOR THE TREATMENT OF FEMALE STRESS URINARY INCONTINENCE

Descouvieres C., López J., Cohen D., Acevedo C., Riveros L.
Hospital Clínico FACH & Clínica Alemana de Santiago

Introduction: We present the experience with TVT-O by a single surgeon for the treatment of female stress urinary incontinence.

Methods: Retrospective study evaluating 30 consecutive patient files operated by the same surgeon under De Leval's technique with Gynecare TVT-O (Johnson & Johnson). All patients were assessed before surgery by the author with examination and urodynamic study. Surveys about quality of life (Qol) were also implemented. To evaluate the magnitude of the problem a Visual Analogue Scale (VAS) was utilized, where 10 represented absence of problem. As cure rate we included absence of urine leakage and the VAS postoperative was also tabulated.

Results: Average age was 53 years, and parity 2,6. 50% (15/30) presented moderated to severe stress urinary incontinence. 33% (10/30) had mixed urinary incontinence and 13% (4/30) had recurrent incontinence. In nine of the thirty patients only TVT-O was performed, with an average surgery time of 23 minutes. In the other 21 patients TVT-O was made in addition to other procedures with an average surgery time of 95 minutes. No intraoperative complications were observed. Average hospitalization was 2 days and Foley catheter one day. During postoperative control, 27 patients considered themselves as recovered (90%) and 24 presented VAS of 8 or more. Of the 16 patients that presented urgency symptoms 12 resolved after the procedure. 2 patients presented "de novo" urgency (7%) and four voiding symptoms (13%). One patient presented vaginal erosion and one required section of the tape six months after because of obstructive uropathy. Every patient was consulted if they would recommend the procedure to other patient with the same pathology and only one said no.

Conclusion: TVT-O technique demonstrated being a safe procedure, with high index of short term success and that achieves an improve in Qol of our patients. The cases where the novo urgency presented, represent percentages similar to those actually reported in the literature.

INCIDENCE OF FECAL INCONTINENCE IN PATIENTS WITH URINARY INCONTINENCE

Waitman M.C., Boaretto J.A., Casellato T.F.L., Gimenez M.M.
Wuo L.L., Moreno A.L., Girão M.J.B.C.

Universidade Federal de São Paulo (UNIFESP), Escola Paulista de Medicina (EPM), São Paulo, Brazil

Objective: The main mechanism of the fecal continence is the pelvic floor more precisely, the anus levator muscles, that take over fundamental importance in the maintenance of the anatomical support and of the abdominal pressure. The correlation of the urinary incontinence of effort with the fecal incontinence is directly linked in the anatomical considerations. Being this way, the goal of this study is to verify fecal incontinence incidence in the patients with urinary incontinence of effort diagnosis attended by to Ambulatory physiotherapy team of Urogynecology da UNIFESP.

Methodology: It was study a record data retrospective study of the patients attended in Urogynecology Discipline Sector and Vaginal Surgery, of Universidade Federal de São Paulo – Escola Paulista de Medicina, in june period 2003 for may 2005. They were analyzed 87 files of patients attended by to physiotherapy of the Sector, all with urinary incontinence of effort proved by the urodynamics studies.

Results: The average age belonged to 52,3 years, being 64% were in the menopause; the average number of gestations and vaginal childbirths were, respectively, 5,58 and 3,06. Regarding the intestinal system of these patients 63% evacuate one or more times to the day and 37% present intestinal constipation, 38% (33 patients) present partial fecal incontinence, 14% (12) presented total fecal incontinence and 48% (42) did not present any semeiotics of fecal incontinence.

Conclusion: We observe, with this study, that 52% of the patients evaluated by the physiotherapy, with complains main of urinary incontinence, presented some degree of fecal incontinence, demonstrating the investigation eminent importance of the intestinal system those patients, for a better therapeutics direction the employed being obtaining itself, this way, one improves global of life quality of these women.

EVALUATION OF THE SEXUAL INSATISFACTION IN WOMEN WITH URINARY INCONTINENCE

Waitman M.C., Wuo L.L., Moreno A.L., Gimenez M., Benitez C.M., Boaretto J., Simões R.D., Girão M.J.B.C.

Universidade Federal de São Paulo (UNIFESP), São Paulo, Brazil

Objective: It objectified in this study evaluate the predominance of sexual insatisfaction in women with urinary incontinence.

Methodology: It was study an ambulatory files retrospective longitudinal clinical study of Physiotherapy of the Sector of Urogynecology and Vaginal Surgery of the Gynecology Department of the UNIFESP-EPM in the period of january by august of 2005. They were selected 48 files that owned the corresponding information to the searched criteria. All the patients presented urinary incontinence type I and II, proved by urodynamics studies. The registered data consisted of age, type of urinary incontinence, sexual activity (present or absent), sexual satisfaction (satisfied or unsatisfied) and type of sexual dysfunction second the World Health Organization (WHO) classification. For statistical analysis was used the averages method for dependant samples.

Results: The patients presented average age of 52 years. Urinary incontinence of effort was represented by 32 (66,6%) patients, 11 (22,9%) presented mixed urinary incontinence and 5 (10,4%) detrusor instability. Sexual activity was represented by 35 (72,9%) patients and 13 (27%) presented absence of sexual practice. Considering patient sexually active (n=35), sexual satisfaction was found in 20 (41,6%) patients and in 15 (31,2%) dissatisfaction. The found sexual dysfunctions were lack of represented wish by 9 (25,7%) patients, dispareunia for 7 (20%), urine loss for 7 (20%), failure of the genital answer for 1 (2,8%), conjugal problems for 1 (2,8%) patient. Curious die was found in the patients' satisfied group (n=20) where we find dispareunia reports in 2 (10%) patients, urine loss in 6 and lack of wish in 1 (5%), even the patients considering itself satisfied sexually.

Conclusion: It concludes that there is a high predominance of sexual dysfunctions in women with compatible urinary incontinence to the literature. The founder sexual dysfunctions, in this study, were lack of sexual wish, dysfunction orgasm, dispareunia and urine loss to the coitus.

MUSCULATURE CONSCIENCE AND FORCE EVALUATION OF THE PELVIC FLOOR IN WOMEN WITH SEXUAL DYSFUNCTIONS

Waitman M.C., Wuo L.L., Moreno A.L., Benitez C.M.
Bellomo F.G., Simões R.D., Girão M.J.B.C.

Universidade Federal de São Paulo (UNIFESP), São Paulo, Brazil

Objective: Evaluate musculature conscience and force of the pelvic floor in women with sexual dysfunctions.

Methodology: It was a retrospective longitudinal clinical study in the period of January by August 2005. They were selected 35 files that owned the corresponding information to the searched criteria. The registered data consisted of age, type of sexual dysfunction, conscience perineal divided into present (first or second solicitation) or absent, contraction perineal comprehension, divided into absent, bad, regulate, good or great and muscular force perineal having as comparative parameter to the scale of functional evaluation of the pelvic floor of Ortiz. For statistical analysis was used the averages method for dependent sample.

Results: The found average age belonged to 36,4 years. The results showed that 23 (65,7%) women presented lack of sexual wish, 4 (11,4%) presented dysfunction orgasm, 4 (11,4%) vaginismo, 3 (8,5%) dyspareunia and 1 (2,8%) presented as it complains partner's sexual dysfunction. The patients who presented conscience perineal represented 32 (91,4%) of the 35 evaluated patients, and 18 (51,4%) presented contraction perineal in the first asked time and 15 (42,8%) in the Monday time. Regarding the contraction perineal quality 11 (31,4%) patients showed good performance, 11 (31,4%) presented regular performance, 7 (20%) bad performance and 2 (5,7%) presented great contraction. Regarding the musculature force of the pelvic floor, 2 (5,7%) patients did not present force (zero), 7 (20%) presented bad muscular force (1), 13 (37,1%) regular force (2), 8 (22,8%) good performance (3) and 1 (2,8%) patient presented great muscular force (4).

Conclusions: Consonant the literature 42,8% of our patients present deficit in the voluntary contraction of the musculature perineal, what demonstrates the need to a personalized individual training accomplished by the physiotherapist so that the clinical treatment, which they are motivated presents the waited result.

PELVIC INDICATIONS AND LUMBAR PAIN IN WOMEN WITH CHRONIC PELVIC PAINWuo L.L., Miranda R., Waitman M.C., Trípoli T.M.
Moreno A.L., Girão M.J.B.C., Apollaro E.F.Sector of Chronic Pelvic Pain and Endometriosis, Department of General Gynecology,
Escola Paulista de Medicina – UNIFESP

The objective of this study was to verify the presence of indications as lowback pain, dyspareunia, dysmenorrhea, urgency miccional, urinary incontinence of effort and constipation in women with chronic pelvic pain. For that were evaluated 20 women with chronic pelvic pain submitted to laparoscopy where was not discovery alterations. It was then accomplished an anamnesis trying to investigate historical of the indications cited above. Of the 20 evaluated patients, 60% are in menacme, 75% are multíparas, and 75% are sexually active. Lowback pain indication was present in 95% of the patients, 35% referred to urinary indications, and 25% complained about urinary loss to the efforts and 15% urgency miccional. Obstipation was complains present in 75% of the patients. Dysmenorrhea and dyspareunia were present in 60% and 65% of the patients, respectively. Among situations that worsen and alleviate the pelvic pain 40% women related that its pain increased to the physical effort and 55% related pain relief to the repose. With regard to the complaint of lumbar pain the repose alleviates the pain in 70% of the patients with historical of lowback pain. It concludes then that patients' great majority with pelvic pains complains about pains in the loins. The relation among indications cited with the chronic pelvic pain, recently, has been explained as being result of deficiency osteo-muscle-ligamentar in the lumbar, pelvic regions and of the hip that are responsible for change the stabilization loin-pelvic mechanisms. In this sense, it is believed that the articular, musculoskeletal and deviations posturais can pledge the pelvis function and to be responsible for a set of pelvic indications associates the pelvic pain.

TRIGGERS POINTS IN WOMEN WITH CHRONIC PELVIC PAIN

Wuo L.L., Camparim P., Miranda R., Trípoli T.M., Waitman M.C., Girão M.J.B.C., Schor E.

Sector of Chronic Pelvic Pain and Endometriosis, Department of General Gynecology,
Escola Paulista de Medicina - UNIFESP

The objective of this study was to verify triggers points in women with chronic pelvic pain. For that were evaluated 20 women with complains about chronic pelvic pain. They were not pregnant included, women with falls history, fractures and recent luxations, with endometriosis suspicion, mioma uterine, pelvic varicose veins, urinary infections or neurological diseases. The evaluation was based on trigger points identification by means of the muscular palpation of 18 points located in the occipital regions, trapezius muscle, scapula, breastbone, epicondilo, gluteo, knees, trochanter and triceps-sural. They also were evaluated pain and points triggers to the palpation of the abdominal, thigh, perineum and pear-shaped. 15 patients referred to dysmenorrhea and 12 dyspareunia. Three patients had fibromyalgia diagnosis. The points triggers evaluation in the abdomen regions, thigh, perineum and pear-shaped, describe how to having relation with the pain located in the pelvic region, could be observed in 15 patients. Of the 15 patients that referred to dismenorréia all of them presented points trigger and pain the palpation of the abdominal muscles, mostly in the region of abdominal rectum between pubic symphysis and the umbilical scar. Among the 12 women who referred to dispaurenia all of them presented pain to the palpation of pear-shaped and pelvic parquet. Of the 20 evaluated patients 5 women did not present points triggers that could have relation with the pelvic pains and with for fibromialgia. It concludes that the points triggers located in the abdomen and perineum regions seem to have direct relation with dysmenorrhea and dyspareunia complaints.

ARTICULAR ALTERATIONS OF THE LUMBAR, SACRED-ILIACA AND FEMORAL LAME COLUMN IN WOMEN WITH CHRONIC PELVIC PAIN

Wuo L.L., Trípoli T.M., Miranda R., Moreno A.L., Waitman M.C., Girão M.J.B.C., Sato H.

Sector of Chronic Pelvic Pain and Endometriosis, Department of General Gynecology,
Escola Paulista de Medicina – UNIFESP

The objective of this study was to verify articular alterations in the lumbar column, sacred-ilíaca and lame-femoral region in women with complaints of chronic pelvic pain.

They were evaluated 40 women with complains about chronic pelvic pain with aggravation in the situations of physical effort and postures statices maintenance for prolonged time. The patients they submitted the evaluation physical to evaluate integrity articulate, pain and dysfunctions in the articulations of the lumbar, sacred-ilíaca and lame-femoral column. They were considered positive the tests in which the patients related pain to the positioning and manipulation, according to each evaluated region. It saw itself then that 90% of the women related pain to the accomplishment of the manual articular tests to verify implication of the lumbar articulations. According to the accomplishment of the too much manual articular tests to verify the dysfunctions and pain in the lame-femoral and sacred-ilíaca articulations, 60% of the patients referred to lame-femoral pain and 40% sacred-ilíaca pain.

It was concluded that in women with chronic pelvic pain, the articulations of the pelvic waist, lumbar column and hip seem to be subject the biggest compression/waste and proner the lesions, so that in the accomplishment of the manual articular tests was possible to observe pain to the positioning and manipulation of these regions. These alterations can contribute for the picture pain, justifying professional's performance of the physiotherapy area in the women's evaluation with chronic pelvic pain.

CURRENT MODALITIES IN PELVIC FLOOR REHABILITATION

Oviedo J.G., Rodriguez C., Alfaro J.A., Velazquez M.

Pelvic floor rehabilitation is a forgotten subject in the current practice of gynecology in Mexico. The objective of the video is to show some of the elements that we have in the clinical practice. Kegel is recognized as the first one to introduce pelvic floor exercises for rehabilitation. He introduced in 1948 the perineometer as a device for pelvic floor biofeedback. The fundamental objective of pelvic floor reeducation is for the patient to be aware of the perineal muscles, and how to control them. In the video submitted, a vaginal device is shown with an indicator for the patient to be aware if the pelvic muscles are being stimulated adequately. If the exercise is done correctly, the indicator will point down because the levator plate of the pubis is being contracted. If the gluteal or adductor muscles are contracted the indicator will point upward or it will not move; the same can be stated by performing a valsalva. The patient is asked to perform 8 to 10 quick contractions (one per second), and slow progressive contractions lasting 5 to 8 seconds each. Another device shown is a PFX, vaginal cones and finally electrical stimulating therapy.

MASSIVE IRREDUCIBLE PELVIC ORGAN PROLAPSE DUE TO HUGE FIBROID

Rajamaheswari N., Seethalakshmi K., Meena M.

Govt. Kasturba Gandhi Hospital, Madras Medical College, Chennai, India

Introduction: Pelvic Organ Prolapse is one of the most distressing problems of women. Sometimes, Pelvic Organ Prolapse may become irreducible, and make their life miserable compromising micturition and defecation. Whenever Pelvic Organ Prolapse is irreducible one should remember to exclude the possibility of a tumor in the uterus like fibroid.

Case Report: 48 Yrs old Mrs. L delivered all her 3 children vaginally (at home) was referred for the C/o. Mass descending per vagina for 3 yrs. Patient did not complaint any significant urinary or bowel symptoms. Clinical examination did not reveal any abnormality. Local examination of vulva revealed massive Procidentia with, Cystocele, rectocele, Enterocoele and total eventeration of vagina (Foot-long Procidentia). The Procidentia was irreducible even under anesthesia which suggested the possibility of the uterine pathology with enlargement of uterus. The Ultrasound scanning of the prolapsed uterus showed a huge fibroid measuring 10x10x8.5 cm. Intravenous urogram revealed bilateral hydro ureteronephrosis with anatomical distortion of the lower ureters. Vaginal hysterectomy with repair and reconstruction was planned. Under anesthesia, Vaginal hysterectomy was done with fibroid in situ. Followed by McCalls Culdoplasty, bilateral Sacrospinous colpopexy, levatorplasty, perineal body reconstruction and Cystocele repair. The removed uterus with fibroid weighed 950 gms. Patient was discharged on 14th Post-operative day. Histopathology confirmed the uterine leiomyoma.

Discussion: This case is presented for its rarity. The cause for irreducibility in this case was uterine enlargement with huge fibroid. Such massive prolapse with fibroid uterus was incapacitating and causing extreme distress. Women are used to carrying babies weighing 3.5 - 4.5 kg within the uterus with intact uterine support. But it is extremely distressing for any woman to carry the uterus which is totally lying outside that too with a tumour within the uterus (weighing 950 gms). The fact that she has approached the hospital, certifies her untold agony associated with the Foot-long Procidentia which somehow forced her to approach the specialist for relief. Though it was a challenging surgery, because of its mammoth size and weightiness of uterus with complete eventeration of vagina, repair and reconstruction could be accomplished without injuring the lower urinary tract and other adjacent viscera. This report emphasizes that the specialist should always remember the possibility of uterine mass such as fibroid uterus as reason for irreducibility and it is possible to successfully repair and reconstruct without injuring the vital structures.

VESICO UTERINE FISTULA – A REVIEW

Rajamaheswari N., Seethalakshmi K., Meena M.

Govt. Kasturba Gandhi Hospital, Madras Medical College, Chennai, India

Introduction & Objective: The objective of this study is to analyze the aetiology, surgical approach and outcome of vesico uterine fistulae.

Materials & Methods: This is a retrospective study conducted at Department of Female Urology & Urogynaecology, Government Kasturba Gandhi Hospital for women and children, Chennai, India which is a tertiary referral centre. During the 10 years period, from 1995 to 2005 there were totally 208 cases of vesico vaginal fistulae referred to our Department for treatment. Out of this, fourteen patients were diagnosed to have Vesico Uterine fistula (VUF). Age of these patients varied from 23-32 years (mean age 26 years). These fistulae were repaired after intravenous Urography, Cystoscopy (with methylene blue test) and Hysteroqram. Twelve patients underwent transabdominal repair with omental interposition. Two patients required total abdominal hysterectomy. Two patients underwent transvaginal vesicouterine fistula repair with martius flap and reconstruction of anterior lip of cervix.

Results: All these cases were referred for the complaint of urinary leakage and menuria. All developed VUF following caesarean section. 6 women developed VUF following single caesarean section. 4 women had 1 vaginal delivery prior to caesarean section and then developed VUF. Two women developed VUF following two caesarean sections. In another patient, she has undergone first LSCS followed by a forceps delivery which was again followed by a caesarean section, performed for an impending rupture of the uterus. This patient developed a Rectovaginal fistula also, which was repaired along with VUF repair. Another patient had LSCS, followed by an MTP & then a caesarean section. Twelve patients underwent abdominal repair and two patients underwent vaginal repair. All these patients had a successful outcome.

Discussion: It was possible to achieve 100 % success of all VUF following surgical correction. The risk factor for the development of VUF was identified as previous one or two caesarean sections.

Conclusion: Caesarean sections constitute the major risk factor for VUF development and it is possible to successfully cure all fistulae by surgical repair. This review also emphasizes the feasibility of a vaginal approach for repair.

VESICO VAGINAL FISTULA – INDIAN EXPERIENCE

Rajamaheswari N., Seethalakshmi K., Meena M.

Govt. Kasturba Gandhi Hospital, Madras Medical College, Chennai, India

Objective: Surgical repair remains the primary method of treatment for Vesico vaginal fistulas (VVF) regardless of the aetiology. This study is aim to review the aetiology, surgical approach and outcome.

Methods: This is a retrospective study conducted at Department of Female Urology and Urogynaecology, from January 2000 to January 2005. 55 VVF patients were referred for continuous leakage of urine per vagina. Out of 55 cases of VVF, 34 cases followed deliveries and its related surgical procedures and 18 cases were due to Gynaec surgical procedures, 3 cases followed road traffic accident.

Surgical Approach: Transvaginal and Transabdominal approaches were used for the repair of VVF. Out of 55 patients, 32 underwent transvaginal VVF repair and 21 underwent transabdominal repair. 2 patients required urinary diversion procedures. One patient required bilateral ureteral reimplantation along with transvesical VVF repair for concomitant ureterovaginal fistula. Out of 32 cases of VVF (Transvaginal approach group), 26 cases underwent repair with Martius flap. 6 cases underwent repair with peritoneal graft. Out of 23 cases of VVF (Transabdominal approach group), 21 cases underwent bladder bivalving and repair with omental interposition.

Results and Surgical Outcome: In transvaginally repaired group, 93% had successful outcome following first repair. 7% had recurrent fistula which was repaired successfully in the second attempt. In transabdominal approach group, none of the patient had recurrence. In the transvaginally repaired group, out of 32 VVF, 19 were due to obstetric procedures and 10 were due to gynaecological procedures. The remaining 3 were due to road traffic accident. In the transabdominally repaired group, 15 were due to obstetrical procedures and 8 were due to gynaecological procedures. The recurrence of the fistula was observed only in the transvaginally repaired cases of obstetric aetiology. In both transvaginal and transabdominal repaired group, the surgical outcome was excellent in fistulae following Gynaec procedures.

Conclusion: In non-obstetric cases it was possible to achieve 100% success in the very first attempt irrespective of the approach. Though, the transvaginal repair is preferable and is associated with good success rate, 7% failure was encountered when repair was performed for obstetric fistula cases.

**ABDOMINAL SURGERY FOR UTEROVAGINAL PROLAPSE:
SACROPEXY VS HYSTEROCOLPOSACROPEXY**

Costantini E., Mearini L., Zucchi A., Giannantoni A., Vianello A., Saccomanni M.
Del Zingaro M., Porena M.

Urology Department, University of Perugia

Objectives: The pathologic descent of the uterus is the result and not the cause of genital prolapse and hysterectomy is not as important as the repair nor should it be the prime objective of surgery for genital prolapse. We prospectively compare sacropexy with and without hysterectomy in patients with uterovaginal prolapse. We describe the surgical techniques and compare the efficacy and the overall results.

Methods: Eighty-one consecutive patients affected by grade III-IV uterovaginal prolapse underwent colposacropexy (CSP). Accurate informed consent was obtained. Forty-three patients underwent hysterectomy followed by sacropexy (CSP) and 38 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. 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 115 months (mean 50 months). Check ups were scheduled at 3, 6, 12 months and then annually.

Results: No significant differences emerged in clinical and demographic details in the two groups. Mean operating times, intraoperative blood loss and hospital stay are significantly less in the HSP group ($p < 0.001$). The uterus or vaginal vault is well supported in all, only 1 patient required surgery for recurrent rectocele. In HSP 5 patients had asymptomatic grade II cystoceles and 4/5 had been treated with the original 1-mesh technique. In CSP 6 low-grade posterior defects were observed. Overall results show no significant differences in the two groups with a satisfaction rate of 89% in HSP vs 86% in CSP.

Conclusions: Sacrocolpopexy with or without hysterectomy provides a secure proximal and distal anchorage without tension with similar results in terms of prolapse resolution and improvements in voiding and sexual dysfunctions. HSP had shorter operating times and less blood loss and can safely be offered to women with symptomatic descensus who request uterine preservation.

SURGERY FOR STRESS URINARY INCONTINENCE

Grossi O., Longo E., De Marco R.

**DOPPLER GUIDED HAEMORRHOIDAL ARTERY LIGATION
(HAL DOPPLER): A NEW TREATMENT FOR
II AND III DEGREE HAEMORRHOIDS: TECHNIQUE AND
FUNCTIONAL RESULTS**

Testa A., Romano P.

General Surgery Department S.Pietro Hospital, FBF, Rome, Italy

Purpose: The Haemorrhoidal surgery developed a lot of techniques to find the best results: but a good result it's not only to resolve the preoperative problems, like bleeding or itching or pain or prolapse during and out of the evacuation; it's also very important that this surgery is followed from a less complication. Our purpose is to expose a new surgical technique for the treatment of II-III degrees haemorrhoids with pain-less and complication free post-operative period, with a considerable improvement of clinic story and with a very short time for return to work or to normal daily activity.

Methods: The HAL Doppler procedure is performed with a special proctoscope that with an US probe, that lies on a side part of the proctoscope, can explore, above the dentate line, the arterial flux where the terminal branches of median rectal artery enter into the rectal wall before doing the CCR (corpus cavernosum recti). Across the proctoscope and with a special needle it's possible to suture precisely the artery found with the US and also to verify immediately the result of the suture. This procedure is performed, always above the dentate line, first at level of the principle haemorrhoidal peduncles (3,7 and 11 hours with the patient in gynaecological position) and then in the interposed side, substantially where it's possible to hear an haemorrhoidal branch. This procedure is practicable in local anaesthesia but, because the operation time is normally 30'-40' and some minutes more if you want to perform also a colonoscopy, we think it would be better a good sedation or a pharyngeal-mask anaesthesia to improve the intraoperative comfort for the patient (and also for the surgeon!).

Results: One or 2 hours after the surgery the patient generally doesn't feel any symptoms because of the absence of anal wounds. The first evacuation doesn't give any pain; only a light discomfort like an intra-anal weight can persist for 24-48 hours. The discharge is possible in the evening or almost at next morning. The sphincter tone is investigated in a group of 30 patients with a pre-operative anal-manometry and a control test at 1 month; the resting and a squeeze pressure values were unchanged. Obviously there are not stenosis or incontinence problems in this patients. The first effect after DGHAL is the interruption of the arterial flux to internal haemorrhoids and consequently a reduction or total elimination of haemorrhoidal bleeding; this effect produces also the shrinkage of a cushions that just after the first days begin to involve their intra-anal size and so also to opposite the prolapse tendency because of the ano-rectal mucosa fixation with the suture. The risk of an haematoma after suture is very low but it's present in 1% of the most important series.

Conclusion: The HAL Doppler procedure can modify the management of hemorrhoids because make possible to allow a very comfortable results in patients with II-III degree hemorrhoids particularly if bleeding and minimizing the operative trauma. The most important series demonstrate stable results in the next 3-4 years. The best advantage is the quite absence of complications and the evidence of significantly improvement of clinic story. This procedure allows to approach the hemorrhoids in a early steps and can realize, over than a therapeutic effect, also a really prevention of more serious pathological degree.

TO EVALUATE FEMALE SEXUAL FUNCTION AFTER COLPOPERINEOPLASTY

Hyun Hee Jo, Jin Hong Kim

Catholic University Medical College, Seoul, Korea

Objective: To evaluate female sexual function after colpoperineoplasty.

Methods: Women who visited regional clinic for colpoperineoplasty from June. 2004 ~ Aug. 2004. filled in FSFI (The Female Sexual Function Index) questionnaire before and 4 months after surgery. 6 weeks after surgery, they start pelvic muscle training with HMT 2000.

Results: Frequency of coitus, desire, arousal, lubrication and orgasm was increased after colpoperineoplasty. Percentage of who had coitus more than once a week increased from 18% to 63%. In sexual desire, about 18% felt sexual arousal more than or about half the time before surgery, but increased to 45% after surgery.

In sexual arousal, percentage of who felt sexually aroused during more than half of sexual activity increased from 34% before surgery to 69% after surgery. In Lubrication, percentage of who became lubricated during more than half of sexual activity increased from 44% before surgery to 82% after surgery.

Who reached orgasm more than half of sexual activity increased from 29% before surgery to 70%.

Conclusion: Colpoperineoplasty increased female sexual activity.

COMBINED OBTURATOR - PRE PUBIC CYSTOCELE AND INCONTINENCE REPAIR: PRELIMINARY RESULTS

Palma P., Contreras O., Sarsoti C., Riccetto C., Geo M.S., Muller V., Del Roy C.

Universidade de Campinas, Brazil, Hospital Mater Dei, Brazil, Hospital Alvorada Brazil
Universidade de Buenos Aires, Hospital Italiano, Argentina

Objective: The Aim of this study is to assess the performance associated with a new mesh using a combined pre-pubic and transobturator approaches, correcting at the same time stress urinary incontinence (SUI) and anterior vaginal prolapse (AVP). Safety was evaluated by measuring the complication rate associated with this procedure. The design of the device and the handling aspects were also assessed. The effectiveness was evaluated by the ICIQ-SF, OABq, FSFI, King's, FIDI and POP-Q, one-hour pad weight test and urodynamics. Subject self-reports, subject satisfaction with the device, and physician assessment were evaluated at office follow-up visits.

Methods: Open-label prospective study. A total of 16 female subjects with AVP with or without SUI were assessed pre-operatively, peri-operatively, at the first post-operative visit at 1, 3, 6, 12 and 24 months post procedure.

Results: A total of twenty-five patients underwent this procedure from October/2004 until September/2005. Mean patients age was 63 years (42 to 98), mean vaginal deliveries was 5 (\pm 2.83). Patients previous surgeries were: hysterectomy in 28% and anterior repair in 20%. Median prolapse degree (B-W) was 2 for cytokines (2-3) and 1 for rectoceles (0-3). Thirty-two percent of patients had SUI (Stamey's degree 1 to 2). Mean ICIQ-SF was 9(\pm 9.19) and the follow-up was 1 to 11 months. The rate of complications was: vaginal infection in 8% mesh exposition in 4% exposition of the pre-pubic rings in 4% persistence of SUI in 4% and one patient had bladder outlet obstruction that was cured with transvaginal uterolysis at the 3rd. month post-operatively (PO). There was no prolapse recurrence or "de novo" detrusor overactivity.

Conclusions: The preliminary data shows that this new device is an effective minimally invasive alternative for the treatment of AVP, even for those associated with SUI.

PELVIC DISFUNCTION IN CONSTIPATED PATIENTS: THE ROLE OF MANOMETRIC EVALUATION

Vieira E., Pupo-Neto J., Lacombe D.

Department of Colon and Rectal Surgery, Clementino Fraga Filho Hospital, Rio de Janeiro
Federal University, Rio de Janeiro, Brazil

Introduction: Chronical Intestinal constipation is a term which represents different symptoms and etiologies. Its prevalence varies from 2 to 30% of the population in Western countries. There is no single definition for constipation, and this is the reason for different conducts. Recently, a consensus definition of constipation was made by physicians (The Roma II criteria), and was expanded for obstructed defecation or pelvic dysfunction, but we don't know the prevalence of pelvic dysfunction in this patients. Anal manometry is a useful management test to evaluate different types of constipation, and is the most used one.

Objective: The aim of this work is to make a review in the literature about the utilization of ano-rectal manometry in constipated patients and analyze retrospectively our constipated patients, who were submitted to ano-rectal manometry.

Methods: Thirty nine (39) constipated patients were, retrospectively studied with anal manometry, balloon expulsion, compliance, and sensitive tests.

Results: The results demonstrated that there were more constipated women (84,61%) than men. We, clinically, subdivided these patients in six groups, in order to evaluate the results better: rectocele 06 patients; functional –07 patients, chagasic megacolon – 07 patients; Irritable bowel syndrome – 03 patients; no more symptomatic in the moment – 03 patients; anal fissure + constipation 04 patients; colo- rectal anastomose-03 patients. The manometric results confirm the diagnostic in: normal- 3; pelvic dysfunction – 13 patients; functional- 2 patients; irritable bowel syndrome – 2 patients; Chagas disease- 5, dysfunction after colon rectal anastomoses - 3.

Conclusion: Based in our data and the revised literature, we conclude that the ano-rectal manometric results, modify the treatment of the constipated patients, the majority were women with pelvic dysfunction and that we can propose that this test must be the first one to be used in those patients.

TRANSOBTURATOR CROSSOVER SLING FOR COMPLEX STRESS URINARY INCONTINENCE

Palma P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto jr. N.R.

Universidade de Campinas, Brazil

Introduction: In the past decade slings have become the preferred technique for the treatment of stress urinary incontinence (SUI) in most centers. In spite of improvement in techniques and devices, there is a subset of patient refractory to standard anti-incontinence procedures. Those patients may benefit from more obstructive slings, that may be achieved fixing the sling with some tension while tied down with more tension than in usual circumstance or ideally using a reajustable sling.

Objective: We present a transobturator crossover readjustable sling, as an alternative for complex cases of SUI.

Technique: The procedure is performed with the patient in the lithotomy position. An 18F Foley catheter is introduced for safety. A 2.5 cm vaginal incision is made, 1 cm from the urethral meatus. The vaginal wall is dissected from the underlying periurethral fascia, bilaterally to the inferior ramus of the pubic bone. The urethra is identified and a right angle clamp is passed between the pubic bone and the urethra, exiting on the other side.

One of the extremities of the sling is grasped and brought behind the urethra to the contra lateral side; the same maneuvers are repeated on the other side.

Next, bilateral skin punctures are made in the genitofemoral fold at level of clitoris and appropriated needles are introduced through the obturator foramen.

The path is made through skin, obturator membrane and muscles, around the ischiopubic ramus and finally out through the vaginal incision. The sling is hooked by the tip of the needle and brought to the previously made incision. These steps are made on the other side creating a spiral sling for better coaptation of the urethra. Silicone washers are used to facilitate latter adjustments should it become necessary. The incisions are closed in the usual manner, and a Foley catheter is left in place overnight.

Conclusion: The results are encouraging, suggesting that this approach may be useful for selected cases of SUI.

ADJUSTABLE MALE SLING: COMBINED PRE AND RETRO PUBIC APPROACHES

Palma P., D. Neto P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto Jr. N.R.

Universidade de Campinas, Brazil

Introduction: Artificial urinary sphincter is considered the gold-standard for the treatment of post prostatectomy urinary incontinence (PPUI). However cost of the device and the risk of mechanical problems is a drawback for its widespread use. The pubourethral male sling has been proposed as an option which can reach high rate of patient satisfaction.

Objective: We present a new readjustable sling, with combined pre and retro pubic approach for the treatment of the PPUI.

Surgical Technique: An 18 F Foley catheter is inserted into the urethra to empty the bladder and to facilitate urethral dissection. The bulbar urethra is then dissected through a midline perineal incision. After that, a 5 cm suprapubic incision is performed. The sling set consists of a silicone foam support hold by four silicone anchoring columns, two silicone washers, and two needles for prepubic and retro pubic approach. The retro pubic insertion of the needles, is made between the urethra and the crura, just below the pubic bone on each side, shaving the back of the pubic bone. Cystoscopic is performed to rule out urethral or bladder perforations. The columns are connected to the needles extremities and pulled out to the previously made suprapubic incision. Next the pre-pubic anchoring tails are passed in the similar manner. The homolateral pre and retro pubic columns are fixed by a silicone washer, over the pubic bone on each side. After coaptation observed by cystoscopy, the retrograde urethral pressure is about 30-40 cmH₂O. The perineum is closed in two layers with absorbable suture and the suprapubic incision is sutured with nylon 4.0. The Foley catheter is left in place overnight. Using similar technique 35(73%) out 48 patients are completely dry, 5(10%) greatly improved, using a pad per day and 8(17%) failed.

Conclusion: This procedure may be an important alternative for male incontinence should these results prove to be long lasting.

ADJUSTABLE CONTINENCE THERAPY (ACT) FOR INCONTINENCE POST ORTHOTOPIC NEOBLADDER IN FEMALE

Palma P., Riccetto C., Dambros M., Herrmann V., Thiel M., Müller V., Netto Jr. N.R.

Universidade de Campinas, Brazil

Introduction: Incontinence after orthotopic neobladder is a very distressing complication for both the patient and the surgeon. This may be even more difficult to manage when a neobladder-urethrovaginal fistula occurs.

Objective: We present a minimally invasive approach especially useful in such a difficult situation.

Surgical Technique: The adjustable device consists of two balloons placed via a paravaginal approach bilaterally at the bladder neck. Titanium ports, attached via tubing to each balloon are placed in the labia majora, allowing for separate volume adjustments of the balloons at any time during and after surgery. The patient was placed in a lithotomy position. A rigid cystoscope was inserted and 50 ml of contrast material instilled to visualize the bladder neck under fluoroscopy. Leaving the cystoscope in place, a puncture was made bilaterally lateral to the labia majora at the level of the bladder neck. Using a specially-designed trocar, under fluoroscopic control, the balloons were positioned periurethrally above the pelvic floor, with the cystoscope functioning as a parallel guide for correct placement. The balloons were then filled with 2 ml of contrast material and sterile water mixed to an isotonic medium. Finally the two ports were brought into a subcutaneous sub labial position to allow for future percutaneous puncture and volume adjustment after surgery. The incisions were closed in the usual manner and a Foley catheter was left in place overnight. The patient is now greatly improved after two adjustments.

Conclusion: This procedure may be an attractive.

COMBINED OBTURATOR - PRE PUBIC CYSTOCELE AND INCONTINENCE REPAIR: RATIONALE & TECHNIQUE

Palma P., Riccetto C., Dambros M., de Fraga R., Müller V., Netto jr. N.R

Universidade de Campinas, Brazil

Introduction: This device system allows for safe, effective and minimally invasive correction of stress urinary incontinence and anterior vaginal wall prolapses. The system includes a polypropylene mesh for bladder support with four anchoring tails, two superior for correction of the stress urinary incontinence and to help supporting the bladder, and two lateral tapes in order to correct lateral defects, and appropriated needles, for pre-pubic and obturator approaches.

Surgical Technique: The patient is placed in the lithotomy position, an Allis forceps is applied at the level of the mid urethra and another to the lower most part of the cystocele.

A midline incision is made between the two Allis forceps. The dissection should be done laterally to the medial edge of the ischio-pubic ramus. The superior needles are inserted transvaginally in a pre-pubic manner, towards the previously made marks on each side.

The arms of the graft are connected to the tip of the needles and pulled the length till the Armpits take the superior part of the body of the mesh to the mid urethra with no tension.

Next the inferior needles are inserted parallel to the ascending ramus of the pubic bone, and turning the wrist and guided by the surgeon index finger, exit through the vaginal incision.

After connectors fixation the inferior tapes are pulled through till the lateral edge of the cystocele. Vaginal incision is closed using overlap technique to avoid contact of the suture line with the mesh. Trimming the vaginal wall is not performed unless necessary. The two vaginal flaps are created. One flap is brought over the mesh and sutured to the base of the contralateral flap and its overlying epithelium is superficially cauterized for destruction of all glandular elements.

Finally, the remaining flap is sutured over the interposed flap to cover it. A foley catheter and vaginal packing is let in place overnight.

DEFECOGRAPHY IN THE STUDY OF POSTERIOR COMPARTMENT OF THE PELVIC FLOOR IN PATIENTS WITH GENITAL PROLAPSE

Gimeno Solsona F., Salvador Izquierdo R., Lacima Vidal G.
Maiques Llácer J.M., Espuña Pons M., Rovira Fíus J.M., Iglesias Guiu X.

CDIC.UMD. ICGON, Hospital Clínic, Facutad de Medicina. Barcelona, Spain

Objective: To establish defecography's value in posterior compartment of pelvic floor diagnosis comparing radiographic findings with surgery.

Methods: We evaluated retrospectively defecographies in 79 patients before surgery (gold standard).

Defecography's technique requires the patient to be seated on a radiotransparent commode, the rectum to be filled with thick barium paste in a quantity not under 300ml, small bowel opacification with 400ml of previously orally taken liquid barium is a must and is essential to take images at the end of the contrast evacuation as the patient squeezes.

Results: 74 patients had coincident diagnosis in radiology and surgery. 55 rectoceles all radiologically diagnosed were repaired and 33 out of 34 radiologically diagnosed enteroceles with 3 false positives and 2 false negatives. Diagnostic reliability was 94% (sensibility 94%, specificity 93%, positive predictive value 91% and negative predictive value 96%).

Conclusions: Defecography confirms clinical suspicion of rectocele, evaluates its size and presence of residue at the end of evacuation and allows diagnosis of enterocele and its classification in stages as bowels descend.

PELVIC SURGERY AND PELVIC FLOOR POSTERIOR COMPARTMENT DISORDERS

Salvador Izquierdo R., Gimeno Solsona F., Maiques LLàcer J.M.,
Lacima Vidal G., Espuña Pons M., Rovira Fius J.M., Iglesias Guiu X.

CDIC. UMD. ICGON, Hospital Clínic, Facultad de Medicina, Barcelona, Spain

Objective: The aim of the study is to establish the influence of pelvic surgical interventions in disorders of the posterior compartment of pelvic floor evaluated by defaecography.

Methods: We have studied 138 patients, 42 without history of pelvic surgery, 12 with surgical repair of urinary incontinence, 26 hysterectomized and 58 with both hysterectomy and surgical repair of urinary incontinence. There were no statistical differences in age ($p = 0.142$) or vaginal deliveries ($p = 0.204$) among the four groups.

Defaecography's technique requires the patient to be seated on a radiotransparent commode, the rectum to be filled with thick barium paste in a quantity not under 300ml, small bowel opacification with 400ml of previously orally taken liquid barium is a must and is essential to take images at the end of the contrast evacuation as the patient squeezes. The whole test is videotaped.

For statistical analysis SPSS v10 has been used.

Results: No significant statistical differences were achieved in the value of ano-rectal angle on basal conditions ($p = 0.288$) and during defecation ($p = 0.709$), rectocele's frequency and size ($p = 0.709$) ($p = 0.115$), frequency of rectocele with residue ($p = 0.506$) and frequency of rectocele with rectal intussusception ($p = 0.921$). Enterocele appeared significantly more frequent in hysterectomized patients ($p < 0.001$), and there were no differences in frequency ($p = 0.557$) and stage ($p = 0.632$) of enterocele between hysterectomized patients and patients both hysterectomized and urinary incontinence repaired.

Conclusions: Pelvic surgery has no influence in rectocele development or characteristics where as hysterectomy alone or associated with urinary incontinence repair increases significantly enterocele's development.

PELVIC FLOOR THERAPY WITH EMG-BIOFEEDBACK FOR CHRONIC VOIDING DYSFUNCTION AND DETRUSOR SPHINCTER DYSSINERGIA IN CHILDREN: A PRELIMINARY REPORT OF THE CLINICAL EVALUATION OF URODYNAMIC FINDINGS, CYSTOGRAPHY, ULTRASOUND BLADDER MEASUREMENTS AND QUALITY OF LIFE EFFICACY IN THE LONG TERM FOLLOW UP STUDY

Kracochansky M., Trigo Rocha F., Dambros M., Riccetto C., Palma P.C.R.

State University of Campinas, São Paulo, Brazil

Introduction/objectives: Non-neurogenic lower urinary tract dysfunctions in childhood usually manifest themselves by urinary infections in conjunction with urinary incontinence. Some children learn to retain urination by contracting the sphincter, rather than relaxing it while contracting the detrusor, causing an increase of vesical pressure and incomplete evacuation of the bladder and leading to a functional obstruction of bladder evacuation. EMG-Biofeedback uses equipment that monitors muscular activity and shows these data to the patient continuously, in the form of visual signals. The child learns to contract and relax the musculature of the pelvic floor and uses this knowledge during urination.

Methods: We conducted a prospective clinical study involving uncoordinated voiding patients, which received the approval of the Hospital Ethics Committee. Twenty-one children (5 boys and 16 girls; mean age, 10 years) were selected as candidates to treatment in an outpatient clinic of Children voiding Dysfunction.

During the sessions, pelvic floor training and biofeedback were reinforced. At the end of each session a flowmetric study was made. The evaluation of the results was made through urine examinations for control of infections of the urinary tract, by analyzing the number of pads used in a month, by filling out a bladder diary, the number of incontinence episodes in a month, a vesical ultrasonography for evaluation of post-micturitional residue, a cystography for evaluating vesicoureteral reflux, an urodynamic study and by filling out the Quality of Life Questionnaire. All of these measurements were taken pre and post treatment.

Results: The table below shows the main results of our research in terms of medical examinations as well as in the clinical evaluation. Results show significant improvement.

	IE	UTI	PD	VUR	QoL
Pre Treatment	33.8	6.3	31	0.76	1.5
Post Treatment	0.5	0.2	0	0.19	4.7
p value	0.0001	0.0001	0.0001	0.0001	0.0001

IE = the number of incontinence episodes in a month; UTI = urinary tract infections in a month; PD = number of pads used in a month; VUR = vesicoureteral reflux; QoL = Quality of Life score.

Conclusions: This combining pelvic floor physiotherapy with EMG-Biofeedback is a non-invasive and secure method with enduring results.

**REPAIR OF POSTERIOR VAGINAL WALL PROLAPSE
USING TENSION FREE MESH**

Amato A.R., Zangone M.A., Ponte D.A., Calamera P.M., Murias S.

Buenos Aires Argentina

Objective: To evaluate the results of the tension-free polypropylene mesh for vaginal repair of posterior vaginal wall prolapse using rectocele repair, using mesh type I.

Patients and methods: 73 patients with symptomatic rectocele type II to IV were operated in a period of time through January 2003 to March 2005. The age rate was between 38 and 86 years old (average age: 60 years old).

During the first month the follow-up was every 15 days. Then, it was after 6 months and the last one was after 12 months.

The tension free mesh was placed through a transvaginal procedure. The sides of the mesh were adapted according to the case (range: 4 x 7 cm).

Patients received intra-operative prophylactic antibiotic.

Results: 97% of all patients showed an objective improvement in dyspareunia, constipation, perineal pressure and vaginal mass.

We obtained 1 case of infection in an immunosuppressed patient and 2 cases of mesh rejection.

Conclusion: The traditional techniques of rectocele repair have a high percentage of relapse. The usage of mesh in the rectocele treatment showed better results, more safety and efficacy.

TRANSURETHRAL VESICAL EVERSION

Ubertazzi Longo E., Soderini H., Gerding A., Pruneda Paz J.

Complejo Médico Hospital Churrucua Visca, Servicio de Ginecología, Sección Uroginecología,
Buenos Aires, Argentina

Objectives: To present a case of a transurethral vesical eversion and its surgical correction.

Methods: Clinical case of a 90 years old patient presenting a complete uterovaginal eversion with an irreducible transurethral vesical eversion. LMP 50 years. G3P3. Ischemic stroke with hypotonic bladder since 1999 with permanent vesical catheter. The vaginal surgical approach was used, with a transurethral vesical reduction followed by reduction of the urethral caliber (6 cm) and a vaginal retropubic sling with the Raz technique. A Lefort type colpocleisis was also performed.

Results: The patient was discharged her third postsurgical day after an uneventful stay. She is now through her 11th postsurgical month with normal diuresis recovered and a fully continent pelvic floor.

Conclusions: Since 1966 only 10 cases of transurethral vesical eversion were published. This very low incidence forces us to possess a thorough knowledge of the pelvic floor anatomy and physiology in order to reach an appropriate diagnosis and a correct treatment.

RESULTS OF THE USE OF FORCEPS AND VACUUM EXTRACTOR TO REDUCE THE THIRD STAGE OF LABOUR AND ITS EFFECTS OVER THE PELVIC FLOOR

Illia R., Marzik C.F., Uranga Imaz M., Häbich D.
Fernández M., Manrique G., Engel M.

Hospital Alemán, Obstetrical and Gynecological Department, Pelvic Floor Unit, Buenos Aires, Argentina

Objective: The aim of the study was to compare the use of forceps and vacuum extractor to reduce third stage of labour, considering maternal complications and perinatal outcomes.

Material and Methods: A retrospective review of medical records was done including all births assisted at the Obstetrical and Gynecological Department of the Hospital Alemán, Buenos Aires, between January 1992 and December 2002. 239 forceps and 346 vacuum extractor assisted deliveries were included.

Results: 239 forceps and 346 vacuum extractor assisted deliveries were analyzed. The frequency of newborns with a healthy APGAR score in the forceps Group (FG) was of 99.14% and 93.49% in the vacuum group (VG). Concerning the maternal complications associated with the use of one or the other instrument, none were registered in the VG in 79.59%, compared to 56.81% in the FG ($P < 0.00001$) (OR 2.96 CI 2.00-4.39). In regard of neonatal outcomes, absence of lesion was registered in 85.10% in the FG and 76.79% in the VG (OR 0.58 CI 0.37-0.92). Cephalohematoma was associated exclusively with the use of forceps, while caput succedaneum was associated only with vacuum assisted deliveries. No significant differences were observed between newborn hyperbilirubinemia and the use of any given instrument.

Conclusion: There was a clear and significant evidence of reduced maternal lesions when vacuum extractor was used. Feto-neonatal lesions were slightly minor with forceps use. Even though both instruments are accepted and in use in everyday obstetrical practice, - according to up to date scientific evidence-, when feasible, vacuum extractor should be the instrument of choice when deciding an instrumental assistance for a vaginal delivery, given its proven protective effect on the pelvic floor.

EVACUATORY DISORDERS AND PELVIC FLOOR DYSFUNCTION ASSOCIATED WITH PERINEURIAL CYSTS

Bertoti A.C., Marzik C.F., Rotholz N., Duarte J.M., Gori J.R.

Hospital Alemán, Pelvic Floor Unit, Buenos Aires, Argentina

Background: Perineurial cysts are pathological formations located in the space between the peridoneurium of the spinal posterior nerve root sheath at the Dorsal Ganglion Root, that most often affect sacral roots. Tarlov's original description of these cysts was reported in 1938. In the year 2000 we reported at IUGA a case of multiple perineurial cysts in a woman with a chief complaint of urinary and fecal dysfunction and chronic pelvic pain. **Objective:** To report Tarlov cysts new cases we studied in the last four years. **Material and Methods:** The evaluation was performed among patients with symptoms of radiculopathy, sacral, pelvic or low back pain and evacuatory disorders. The diagnosis was made by magnetic resonance imaging, computerized tomography and myelography, after clinical, laboratory and neurophysiological examinations. **Results:** Tarlov cysts were detected in 3% of patients with complaints of bowel and vesical dysfunctions associated to chronic pelvic pain (7 cases). They were multiple in 4 cases; giant ones in two; six localized in sacral canal only. One of them consisted of lumbar and sacral giant cysts. Three were treated surgically, two with a favorable outcome. **Conclusions:** Peryneurial cysts have been estimated to affect between 4.6-9% of the adult population. They are usually asymptomatic but may cause a variety of pressure symptoms including radicular, hip, leg, foot or perineal pain, paresthesiae and urinary and bowel dysfunction. Tarlov cysts should be considered as a differential diagnosis of sacral radiculopathy, sacral or lumbar pain syndromes associated with pelvic floor dysfunctions. There is a great deal of controversy regarding the optimal treatment of symptomatic cysts. Large cysts (>1.5 cm) and the presence of associated radicular symptoms strongly correlate with excellent outcome after surgery.

CISTOPROCTOGRAPHY WITH DINAMIC MAGNETIC RESONANCE (DMR)

Ocantos J.¹, Fattal jaef V.¹, Pietrani M.¹, Seclen F.¹, Benatti M.², Seehaus A.¹

¹Department of Diagnostic Imaging, Hospital Italiano (Bs. As)

²Department of General Surgery, Hospital Italiano (Bs. As)

Purpose: To show our experience in the evaluation of the pelvic floor by dynamic magnetic resonance (DMR) and to describe the structural and dynamic disorders of pelvis organs. **Material and Method:** From march 2004 to August 2005 40 patients (P) with pelvic floor disorders have been studied, 34/40 women (85 %) and 6/40 men (15%), ages between 16 and 74 years old. An evacuating rectal enema has been indicated 4 hs. prior to examination with bladder retention of 3 hs. 180-240 cc of semisolid paste (thin oats and saline solution) has been used to distend rectum until patients refer sensation of rectum full or a maximum of 240 cc. The study has been performed in a Siemens "MAGNETOM VISION" (1.5 T) with a body array and coil "CP BODY ARRAY FLEX". T2 turbo spin eco axial and sagittal (TR 4700, TE1, 32), T1 coronal (TR 580 TE 14) with a 4mm slice were selected for static sequences and TRUFI sagittal (TR 4.8 TE 2.3) for dynamic acquisitions during rectal and voiding evacuations. The morphology and symmetry of peri-urethral ligaments (PUL), elevator ani muscle (LA), and vagina (V) was evaluated. The organs prolapse was evaluated at rest and maximal pelvis strain using Comiter parameters (Fielding JL) and recording in MPEG video. **Results:** At 10/40 (25%) P was not detected lesions. In 30/40(75%) P was detected 80 defects of the pelvic supports (56,96 % of LA, 15,18% of the vagina (V), 8,75% of PUL and other 20, %). The dynamic sequences shows 63 defects, 47,62% of anterior compartment and 52, 38% of posterior compartment (85% of this patients have defects of EA and all have lines of Comiter elongated). In 9/40 (22, 5%) P the lesions affected both compartment. **Conclusion:** Dynamic magnetic resonance allows the direct interpretation of the very small pelvic floor structure and its disorders (not available by other methods) and the dynamic study of prolapse, providing a more accurate interpretation of its causes. DRM can be very useful in patients with multi-compartment involvement, complex prolapse or recurrence of symptoms post surgical repair.

ABNORMAL URETHRAL EMG IN URINARY RETENTION (UR) IN MAN

Bertotti A.C., Gonzalez Primomo N.S., Duarte J.M., Ghirlanda J.M.

Uroneurophysiology and Pelvic Floor Unit, German Hospital, Buenos Aires

Background: In 1988 Fowler et.al. described a syndrome in young women with urinary retention and abnormal urethral EMG activity. In 2002 Bertotti et al. reported this type of activity in other pelvic floor muscles than urethral sphincter in pre and post-menopausal women. They called this activity as abnormal complex repetitive discharges (ACRD).

Aim of this study: to report ACRD in male urethra of patients with UR.

Patients and methods: Four patients with UR were studied. They were tested for urethral and external anal muscle EMG, sacral reflexes and brain evoked potentials (somatic and autonomic), urodynamic and images studies.

Results: Urodynamic studied showed an obstructive pattern in 4/4. Significant residual urine was found in all patients. ACRD were recorded in every patient during the rest phase of the EMG. At light effort it was recorded chronic peripheral neurogenic patterns in 2 patients with denervation in only one. Abnormal sacral reflexes and BEP was obtained in one patient. Images studies were normal.

Conclusions: ACRD may be found in male urethra in patients with UR. This abnormal urethral EMG may be due to a primary defect to the striated urethral muscle which fail to relax and may generate evacuatory disorders. It is important to recognize this entity not only in women by EMG, in man too.

EVALUATE OF TWO SYNTHETIC SLINGS FOR TREATMENT OF STRESS URINARY INCONTINENCE: RESULTS AND COMPLICATIONS

Salvador Geo M., Correa Lima R., Laranjeira C., Figueiredo Kaukal J., Iamin L.,
FernandesR., Junqueira M., Sousa C.

Mater Dei Hospital, Uromater, Belo Horizonte, Minas Gerais, Brazil

Objective: To evaluate the objective and subjective results and complications of two surgical procedures to treat stress urinary incontinence, using synthetic slings: SafyreT® (Promedon) and TVT® (Gynecare).

Methods: This prospective study included 79 consecutive patients submitted by TVT® between may 1999 and september 2002 and 50 by SafyreT® between august 2003 and may 2005. The average age was 56,5 years in TVT® group and 61 in SafyreT® group. At the urodynamics, 73% out of 79 of TVT® group had stress urinary incontinence and 26,5% had mixed incontinence. 72% out of 50 of SafyreT® group had stress incontinence and 28% had mixed incontinence. The medium liquid point pressure was 98cmH₂O in TVT® and 72cmH₂O in SafyreT®. The postoperative data was assessed by pad test and by third person interview of a validated questionnaire (Blaivas,1999) answered by the patients and the complications was evaluated during the procedure and 2, 6, 12 and then yearly after the operation. We considered the patient cured when pad test was less than 8 grams and at the questionnaire the patients considered themselves cured.

Results: The mean follow-up was 20 months in TVT® group and 8 months in SafyreT® group. The pad test results were negative in 78% of TVT® group and 70% of SafyreT® group. According to the patient questionnaire 67% of TVT® and 58% of SafyreT® were cured, 29% TVT® and 36% SafyreT® reported improvement and 4% TVT® and 6% SafyreT® considered themselves failed. In the TVT® group there were 16,4% of bladder perforation that did not occur in the SafyreT® group. The postoperative complications were: de novo urgency 11,4% TVT® and 8% SafyreT®, urinary retention 2,5% TVT® and 0% in SafyreT®, vaginal extrusion of the mesh 2,5% TVT® and 6% SafyreT®, recurrent urinary tract infection 1,3% TVT® and 6% SafyreT®.

Conclusions: These two surgical procedures presented similar subjective and objective cure. It is necessary a longer follow up to evaluate better the data.

SEVERE INCONTINENCE CAUSED BY TETHERED VAGINA SYNDROME: THE RESULTS OF SURGICAL PROCEDURES

Salvador Geo M., Correa Lima R., Laranjeira C., Figueiredo Kaukal J., Iamin L.

Mater Dei Hospital, Uromater, Belo Horizonte, Minas Gerais, Brazil

Objective: The Tethered Vagina Syndrome, described in the Integral Theory (Petros,1999) is an iatrogenic condition, causing severe incontinence that is untreatable with conventional procedures. The objective of this study is to evaluate the results of surgery, to treat this syndrome.

Methods: This prospective study included 16 patients with typical symptom of the tethered vagina syndrome: inability to stop micturition when getting out of bed, not having urgency before. At the examination all the patients presented vaginal scarring and tethering at the middle segment of the vagina with no significant prolapse. All the patients have in their history previous vaginal anterior repair. The average age was 62,9 years, the mean parity was 4,8 and all patients have been submitted to previous failed treatments for incontinence. The patients was assessed by voiding diary, 24 hours pad test and urodynamics. All the patients presented normal voiding studies. The objective of surgery was to restore the elasticity in the middle segment of the vagina, allowing the muscular movements necessary for bladder neck closure. The surgeries techniques were I-plasty and Graft from labium minus or labium majus (Petros,1999). The postoperative data was assessed by voiding diary, pad test and a questionnaire answered by the patients.

Results: The medium follow-up was 19,5 months. There was a markedly improvement in all parameters assessed. Before surgery the mean results of pad test were 43g, decreasing after surgery to 8g. At the voiding diary we had an improvement in the mean functional capacity and of the day frequency. With the analysis of the pad test and the voiding diary together, 13 patients were cure and 3 failed. At the questionnaire, the patients reported a mean improved of 76%.

Conclusions: The surgical procedures used presented 81% of success. The failures may be attributed to some factors: excessive mobilization of the vagina, resulting stress incontinence and recurrence of the tethered after the procedure.

RECTAL PROCIDENTIA TREATMENT BY PERINEAL RECTOSIGMOIDECTOMY COMBINED WITH LEVATOR ANI REPAIR

Habr-Gama A., Jacob C.E., Seid V.E., Perez R.O., Scanavini NetoBeani Jr A.

Marubayashi L.Y., Gebrin L.H., Kiss D.R.

Hospital Alemão Oswaldo Cruz, Hospital Pérola Byington, São Paulo, Brazil

Introduction: Perineal rectosigmoidectomy has gained acceptance as a valid alternative to treat rectal procidentia with the advantage of decreased surgical risk, shorter recovery time, and lower complication rates when compared to abdominal approaches, although controversies still exist about its recurrence rates and functional results.

Aims: The objective of this study was to evaluate the results of perineal rectosigmoidectomy combined with the repair of the levator ani muscles for treatment of rectal procidentia.

Methods: Forty-eight patients who underwent perineal rectosigmoidectomy with levatorplasty for rectal procidentia between 1986 and 2004 were retrospectively analyzed.

Results: There were 45 women and 3 men with mean age of 76 (57 to 96) years. Mean duration of symptoms was 29.2 (1 to 40) months. Mean length of prolapsed rectum was 8.3 cm and the average size of the resected segment was 21.2cm. The complication rate was 10.5% and there was no mortality associated with this procedure. Mean hospital stay was 3.9 days. During a minimum period of follow-up of 24 months (24-120) with a mean of 49 months, the recurrence rate was 8.4% (three patients presented recurrence of procidentia and another prolapse of the rectal mucosa). Anal continence improved in 36 (85.7%) patients.

Conclusion: Perineal rectosigmoidectomy combined with levatorplasty is a safe procedure associated with a relatively low morbidity rate, satisfactory functional results, and an acceptably low recurrence rate.

ANAL INCONTINENCE IN MEN WITH NORMAL OR INCREASED INTRA-ANAL PRESSURES: CLINICAL AND MANOMETRIC PARAMETERS

Jorge J.M.N., Gasparetti Jr N.L.T., Oliveira K.M.J., Kracochansky M.
Yusuf S.I.A., Habr-Gama A., Kiss D.R.

Division of Coloproctology, University of São Paulo, Brazil

Objectives: Men with anal incontinence frequently present with normal or elevated intra-anal pressures, and the pathophysiology of incontinence in this group of patients remain unclear. The aim of this study was to evaluate clinical and manometric parameters in incontinent males with normal or elevated intra-anal pressures.

Methods: All incontinent male patients referred for physiology investigation underwent clinical evaluation, including anal incontinence index, and anorectal manometry. The manometric parameters were compared to a previously studied control-group. Patients with low anal pressures or with colorectal or systemic organic diseases causing anal incontinence were excluded.

Results: From September 1998 to June 2005, 900 incontinent patients underwent physiologic evaluation; 198 (22%) of them were males, and 34 of these (17,2%) were included in this study. The median age was 40 (9-77) years. The mean anal incontinence index was $4,0 \pm 1,0$ (gas: $2,0 \pm 2,8$, liquid: $1,0 \pm 1,4$, solid stool: $1,0 \pm 1,4$, use of pad: $1,0 \pm 1,4$ and lifestyle alteration: $1,0 \pm 1,4$). History of constipation and associated urinary tract incontinence were referred in 5 (14,7%) patients. The mean resting pressure was 64 ± 18 mmHg; 22 (64,7%) patients had normal and 12 (35,3%) had increased intra-anal pressures. The mean squeeze pressure was 141 ± 45 mmHg; 17 (50%) had normal and 17 (50%) had increased intra-anal pressures. The mean functional anal canal length was $2,5 \pm 1$ cm; the rectoanal inhibitory reflex was considered present on 26 (76,5%) patients, indetermined in 7 (20,6%) patients and absent in 1 (2,9%) patient. The mean rectal sensation was 55 ± 7 ml; 12 (35,3%) patients had normal and 22 (64,7%) had low rectal sensation. The mean rectal capacity was 245 ± 64 ml; 30 (88%) patients had normal capacity. The mean fatigue rate and fatigue rate index were $-0,15 \pm 5,7$ mmHg/min and $-3,6 \pm 9,3$ min, respectively.

Conclusion: Altered rectal sensation and fatigability of the external anal sphincter are mechanisms commonly involved in male patients with anal incontinence.

TRANSPHINCTERIC INJECTION OF DURASPHERE® FOR INCONTINENCE DUE TO INTERNAL ANAL SPHINCTER DYSFUNCTION

Jorge J.M.N., Yusuf S.A.I., Habr-Gama A., Kiss D.R., Gama-Rodrigues J.J.

Division of Coloproctology, University of São Paulo, Brazil

Objective: Patients with weak or disrupted internal anal sphincter frequently fail conservative treatment and surgical treatment for these patients remains controversial. The aim of this study was to determine the efficacy of trans-sphincter injection of a bulking agent, pyrolytic carbon (Durasphere®) in this group of patients.

Patients and method: Twenty two patients (21 females and 1 male), median age, 59, range 34-81 with anal incontinence underwent to Durasphere® injection. Procedures were performed under local anesthesia and antibiotic cover during 10 days. Durasphere was injected circumferentially, 3, 7 and 11h positions. A total volume of 9ml of Durasphere trans-sphincter injection of Durasphere® was injected in 19 patients, and in the remaining 3 patients, 7 ml, 11 ml and 12 ml were respectively injected. Patients were assessed before and 8 weeks after the treatment. Assessment included endoanal US, clinical assessment, anal incontinence score and fecal incontinence quality of life questionnaire (FIQL).

Results: After 8 weeks, 16 patients showed either had marked symptom improvement. Fecal incontinence score improved from a median 13 (range 4-20) before to 7.3 (range 0 – 20) after injection. Resting and squeeze pressures did not show differences significantly during 8 weeks. Resting pressure changed from 31 (range, 6-62) to 33 (range 8-68) and the squeeze pressure changed from 45 (range 6-125) to 52 (range 9-173), after the procedure (p=NS). Endoanal US showed the material in the correct position in most patients; two patients showed the material extrusion one month after the procedure. Quality of life assessment showed improvement in 16 patients the values of FIQL scales were lifestyle 2.2 (range 1-4), behavior 1.8 (range 1-4), depression 2.7 (range 1.7- 4.3) and embarrassment 1.6 (range 1- 4) before and lifestyle 3.0 (range 1-4), behavior 2.6 (1-4), depression 3.3 (range 1.7- 4.3), embarrassment 2.4 (1 – 4.0), after the treatment.

Conclusion: Durasphere® showed improvement in sphincter function and quality of life in patients with weak or disrupted internal sphincter.

THE PREPUBIC MININVASIVE TECHNIQUE: HOW DOES IT WORK?

Leanza V.

Obstetric & Gynaecologic Department, Catania University

Summary: The prepubic route is a new mininvasive anti-incontinence procedure. Since January 2002, seventy five patients suffering from stress urinary incontinence (SUI) and cystocele have been treated with prepubic TICT (Tension-free Incontinence Cystocele Treatment). The mean follow-up was 20 months. Subjectively, incontinence was cured in 69 (92%) patients, improved in 4 (5.3%) and in 2 (2.7%) it was unchanged.

Objectively, S.U.I. was cured in 68 (90.7%), improved in 4 (5.3%) and in 3 (4%) it was unvaried. The cystocele was cured in 70 (93.3%) patients, whereas in 5 (6.7%) patients there was a recurrence of I degree cystocele.

Neither intraoperative nor postoperative complications were found, excepting two cases of erosion. This technique is easy, safe and effective for the treatment of SUI associated with cystocele.

CLINICAL OUTCOMES OF BIOFEEDBACK TREATMENT IN PATIENTS WITH FECAL INCONTINENCE: A COMPARATIVE STUDY WITH UNTREATED PATIENTS

Lacima G., Pera M.*, Amador A., González-Argenté F.X., Escaramis G., Ascaso C.

Pelvic Floor and Digestive Motility Unit, Digestives Diseases Institut, Hospital Clinic, Barcelona, Spain

* Colorectal Surgery Unit, Hospital del Mar, Barcelona, Spain

Introduction: Several studies have demonstrated that biofeedback treatment is effective in patients with fecal incontinence (FI) but there are no studies evaluating the time-course of FI in untreated patients.

Objective: To prospectively evaluate the clinical outcomes of patients with FI treated with biofeedback compared with untreated patients.

Patients & Methods: One hundred nineteen patients with FI to solid stool were prospectively included in a case-control study. Biofeedback (5 sessions) was recommended as the first treatment option in all cases. Seventy-nine patients completed the treatment (cases) and 40 patients were not finally treated for several reasons (controls). Clinical evaluation by means of a questionnaire was performed at baseline and 1 month, 6 months, 3 years and 5 years after completing the treatment in cases. Evaluation in controls was performed at baseline and at the end of the study. The primary variable was number of episodes of incontinence. According to clinical outcomes all patients were classified in 4 groups: recovery of continence (A), reduction of the number of episodes of incontinence greater than 75% (B), reduction of the number of episodes of incontinence lower than 75% (C) and no changes or worsening of continence (D).

Results: Mean follow-up was 35.7 + 22 months (6-86) in cases and 41.3 + 20 months (15-84) in controls. Patients treated with biofeedback presented a significantly better clinical outcome with a positive association with recovery of continence and/or reduction of the number of episodes greater than 75%. Conversely, the majority of untreated patients had no changes or worsening of incontinence by the end of follow-up. We also found statistically significant differences in patients subjective evaluation by the end of follow-up. Patients referring improvement in continence were 91.1% vs. 35%, referring no changes were 7.6% vs. 47.5% and worsening 1.3% vs. 17.5% ($p < 0.001$).

Tab. 1 - Depicts classification of cases and controls according to clinical outcomes by the end of follow-up				
Group	A (%)	B(%)	C(%)	D(%)
Cases	38	48.1	11.4	2.5
Controls	12.5	12.5	22.5	52.5

Conclusions: FI of untreated patients persists or worsens with time. Subjective and objective evaluation has shown that biofeedback treatment is effective on long term follow-up compared with untreated patients.

AUTHORS INDEX

- Abad C., 31
 Acevedo C., 41, 42
 Aigmueller Th., 26, 27
 Alberti D., 36
 Alfaro J.A., 47
 Aliaga P., 23
 Amador A., 11, 69
 Amato A.R., 62
 Amitai M., 25
 Andretta E., 32
 Apollaro E.F., 46
 Arbona J.C., 19
 Arellano M., 35
 Ascaso C., 11, 69
 Assoulin Y., 24, 25
 Auriemma G., 18
 Avidan B., 24
- Bakos E., 12
 Baldarena C., 36
 Bandiera S., 14
 Bar Meir S., 24, 25
 Bauer H., 27
 Beer-Gabel M., 24, 25
 Bellomo F.G., 45
 Benatti M., 64
 Benitez C.M., 44, 45
 Benitez C.m.m., 6
 Berra G., 19
 Bertoti A.C., 64, 65
 Boaretto J., 44, 43
 Bogacz A., 28
 Bogacz D., 28
 Bollo J., 9, 20
 Braun H., 35, 37
 Bravo R., 20
 Bucher S., 39
 Bustamante C.A., 37
- Cabello J.M., 37
 Calamera P.M., 62
 Calomite A., 36
 Camargo F.O., 6
 Camparim P., 46
 Carbonaro A., 14
 Carmona F., 9, 20
 Caruso S., 14
 Casellato T.F.L., 43
 Castro Diaz D., 17
 Cianci A., 14
 Cinque B., 30
 Cohen D., 41, 42
 Colaço J., 17
 Contreras C., 17
 Contreras O., 53
 Correa Lima R., 65, 66
 Costantini E., 51
 Cura G., 28
- Daguerre P., 19
 Dambros M., 17, 55-58, 61
 Dati S., 30
 De Antoni P., 33
 de Fraga R., 55, 56, 58
 De Marco R., 53
 De Vita D., 18
 Del Roy C., 53
- Del Zingaro M., 51
 Dell'Oro A., 35, 37
 Descouvieres C., 41, 42
 Dominese A., 33, 34
 Donati V., 40
 Dost F., 38
 Drahoradova P., 8
 Duarte J.M., 64, 65
 Dungl A., 26, 27
- Engel M., 63
 Escaramis G., 11, 69
 Espuña M., 9, 10, 20
 Espuña Pons M., 59, 60
- Fattal jaef V., 64
 Fernandes R., 65
 Fernández M., 35, 63
 Figueiredo Kaukal J., 65, 66
 Freundlich O., 23
- Gallardo G., 40
 Gama-Rodrigues J.J., 68
 Garbeglio A., 32-34
 Garcia D., 31
 Gasparetti Jr N.L.T., 67
 Gebrin L.H., 66
 Geo M.S., 53
 Gerding A., 62
 Ghirlanda J.M., 65
 Giannantoni A., 51
 Gimenez M., 44
 Gimenez M.M., 43
 Gimeno Solsona F., 59, 60
 Girão M.J.B.C., 43-47
 Girão M.j.b.c., 6
 González F., 35
 Gonzalez F.X., 9, 10, 20
 Gonzalez J.L., 31
 Gonzalez Primomo N.S., 65
 González-Argenté F.X., 11, 69
 Gori J.R., 64
 Grossi O., 53
- Häbich D., 63
 Habr-Gama A., 66-68
 Hannaoui N., 31
 Herrmann V., 17, 57
 Hinterholzer S., 26
 Hyun Hee Jo, 53
- Iamin L., 65, 66
 Iglesias Guiu X., 59, 60
 Illia R., 63
 Issa N., 24
- Jacob C.E., 66
 Jáuregui E., 40
 Jin Hong Kim, 53
 Jorge J.M.N., 67, 68
 Junqueira M., 65
- Kiss D.R., 66-68
 Kobata M.H.P., 7
 Korcek J., 12
 Kracochansky M., 61, 67
 Kuschel S., 38, 39
- Lacima G., 9, 10, 11, 20, 69
 Lacima Vidal G., 59, 60
 Lacombe D., 54
 Lacy A., 20
 Laranjeira C., 65, 66
 Longo E., 53
 Leanza V., 68
 López J., 41, 42
 Lustosa S.A.S., 7, 21, 22
- Mahor Y., 24
 Maiques Llacer J.M., 59, 60
 Mancini S., 7
 Manrique G., 63
 Mariconde J., 40
 Martan A., 8
 Marubayashi L.Y., 66
 Marzik C.F., 63, 64
 Masata J., 8
 Matos D., 7, 21, 22
 Mazzariol C., 32
 Mearini L., 51
 Meena M., 48-50
 Miranda R., 46, 47
 Moreno A.L., 6, 43-47
 Mosso F., 36
 Moya Encinas N., 40
 Muller V., 53, 55-58
 Murias S., 62
- Najjari L., 39
 Nelson P., 16
 Neto P., 56
 Netto jr. N.R., 17, 55-58
 Neuman Menahem, 13, 15
- Ocantos J., 64
 Oliveira K.M.J., 67
 Osorio R., 41
 Ostaro E., 32-34
 Oviedo J.G., 47
- Palma P.C.R., 61
 Palma D., 30
 Palma P., 17, 53, 55-58
 Pastorello M., 32
 Pavalkis D., 29
 Peña J.A., 31
 Pera M., 10, 11, 69
 Perez R.O., 66
 Piccinini S., 7
 Pietrani M., 64
 PignéA., 16
 Pinochet R., 37
 Pizarro J., 35
 Ponte D.A., 62
 Porena M., 51
 Prats J., 31
 Prera A., 31
 Pruneda Paz J., 62
 Puig-Clota M., 9, 10, 20
 Pupo-Neto J., 54
- Qatawneh Ayman, 5
 Rajamaheswari N., 48-50
- Retto H., 17
 Riccetto C., 17, 53, 55-58, 61
 Riss P., 26, 27
 Riveros L., 41, 42
 Rodriguez C., 47
 Rojas I., 35
 Romano P., 52
 Rotholz N., 64
 Rovira Fius J.M., 59, 60
 Rugolo S., 14
- Saad S.S., 7, 21, 22
 Saccomanni M., 51
 Saladzinskas Z., 29
 Salum M.R., 7, 21, 22
 Salvador Geo M., 65, 66
 Salvador Izquierdo R., 59, 60
 Sangiorgio A., 32-34
 Santinelli G., 18
 Sarig Y., 25
 Sarnari J., 7
 Sarrouf J., 19
 Sarsoti C., 53
 Sartori M., 6
 Sato H., 47
 Scanavini Neto Beani Jr A., 66
 Schor E., 46
 Schuessler B., 38, 39
 Seclen F., 64
 Seehaus A., 64
 Seethalakshmi K., 48-50
 Seid V.E., 66
 Simões R.D., 44-45
 Soderini H., 62
 Sousa C., 65
 Stortini L., 36
 Svabik K., 8
- Tamelis A., 29
 Testa A., 52
 Thiel M., 17, 57
 Torres H., 36
 Trigo Rocha F., 61
 Tripoli T.M., 46, 47
- Ubertazzi Longo E., 62
 Uranga Imaz M., 63
- Valentini F., 16
 Valls-Sole J., 10
 Vargas D., 35
 Velazquez M., 47
 Venclauskas L., 29
 Vianello A., 51
 Vicente E., 31
 Vieira E., 54
 Vilchez Acosta R., 36
- Waitman M.C., 6, 43-47
 Werner M., 38, 39
 Wu L.L., 6, 43-47
- Yusuf S.A.I., 68
 Yusuf S.I.A., 67
- Zangone M.A., 62
 Zucchi A., 51