IX MIPS

f f

Annual Congress **LJUBLJANA** 26-28 Sep 2024

> Meeting Chairs Adolf Lukanovic Kristina Drusany Staric

> > Abstract Book Update 17 Jul 2024

Combined Retropubic TVT and classical repair for correction of cystocele and stress urinary incontinence - Indications and limitations

Daša Kreli⁽¹⁾ - Marijan Lužnik⁽²⁾

UKC Maribor, UKC Maribor, Maribor, Slovenia⁽¹⁾ - SB Slovenj Gradec, Department of Gynecology, Slovenj Gradec, Slovenia⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

Managing cystocele and stress urinary incontinence (SUI) poses challenges in urogynecology, necessitating a tailored approach. The combined retropubic tension-free vaginal tape (TVT) and classical repair technique offers a potential solution by addressing both conditions concurrently. This study examines its indications and limitations, emphasising its role in pelvic floor reconstruction.

MATERIALS AND METHODS

A retrospective analysis of 540 TVT procedures, including 150 combined retropubic TVT and classical repair surgeries, was conducted at our clinic from 2011 to March 2024. Demographics, POP-Q scores, and postoperative complications were assessed. Urogynecological ultrasound examinations were pivotal in patient selection and preoperative evaluation. Statistical analysis evaluated the efficacy and safety of the combined approach.

RESULTS

Out of 540 TVT procedures analysed, 150 combined retropubic TVT and classical repair surgeries were performed. Patients had a median age of 58.7 years, and POP-Q scores showed successful pelvic floor disorder management. Postoperative complications, including bladder perforation and minimal vaginal erosion, were appropriately managed.

INTERPRETATION OF RESULTS

The combined approach effectively addressed cystocele and SUI, broadening indications to borderline POP-Q scores and urinary retention. Minimal complications highlighted positive outcomes, emphasising its potential in pelvic floor reconstruction. Advantages included a single-stage procedure, reduced need for multiple surgeries, and improved outcomes for concurrent pelvic floor disorders. However, limitations such as increased complication risk, longer operative time, increased cost and potential over- or under-correction persisted.

CONCLUSIONS

The combined retropubic TVT and classical repair offers a promising solution for cystocele and SUI, with indications including severe cystocele, confirmed SUI, and failed prior surgeries. It provides effective, minimally invasive treatment, extending to borderline cases with a single-stage procedure, representing a significant urogynecological advancement, enhancing outcomes, and patient satisfaction.

Vertical plication technique, a novel technique to decrease recurrence of cystocele post repair

<u>Stuart Quek</u>⁽¹⁾ - Rami Atalla⁽¹⁾ - Lauren Dear⁽¹⁾

East and North Herfordshire NHS Trust, Obstetrics and Gynaecology, Stevenage, United Kingdom ⁽¹⁾

INTRODUCTION AND AIM OF THE STUDY

This study evaluates different methods of anterior colporrhaphy, comparing traditional buttressing and site-specific repair techniques with the addition to the vertical plication technique. The objective is to assess the ease of the technique, operative and post-operative complications, as well as short and medium-term outcomes up to two years.

MATERIALS AND METHODS

The study recruited 51 patients undergoing anterior colporrhaphy between January 2021 and May 2022. Data recorded included the grading of the cystocele, age, demographics, parity, previous surgeries, medical comorbidities, and BMI. All surgeries were performed by one surgeon. The procedure involved making a midline incision in the anterior vaginal wall, separating the vaginal mucosa from the underlying fascial layer, and repairing the weakened fascia with absorbable 1 Vicryl stitches. The new technique was used to approximate healthy paraurethral fascia to the cervix or uterosacral ligaments. Follow-ups were conducted at 3-6 months and 12 months post-surgery, assessing patient satisfaction and prolapse grade improvement through maximum Valsalva effort in the semi-lithotomy position by a non-surgical clinician.

RESULTS

Of the 51 patients, only 2 required repeat surgery within 6 months, both presenting initially with complete procidentia and returned with a Grade 3 vault prolapse and Grade 2 cystocele. Both had only undergone the buttressing technique, and both had multiple vaginal deliveries (parity of 3 and 5, respectively).

INTERPRETATION OF RESULTS AND CONCLUSION

The study found that the addition of vertical plication did not increase complication rates. Recurrences were only observed in patients who had the buttressing technique without vertical plication. Ongoing collection of longer-term follow-up data on a larger cohort is underway to further assess the **reliability and long-term recurrence rates of the technique**.

The Impact of Hysterectomy on Pelvic Floor, Sexual Functions, Quality of Life, Body Perception, and Genital-Self Image

Hande Donmez Koksal⁽¹⁾ - Fulya Dokmeci⁽¹⁾ - Elif Nazli Cetindag⁽²⁾

Ankara University, Faculty of Medicine, Department of Obstetrics and Gynecology, Ankara, Turkey ⁽¹⁾ - Losante Hospital, Department of Obstetrics and Gynecology, Ankara, Turkey ⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

There is a lack of consensus on the impact of hysterectomy on the pelvic floor and sexual functions.¹ This study aims to document the effect of benign hysterectomy in women without pelvic organ prolapse.

MATERIALS AND METHODS

A prospective longitudinal cohort study was conducted. Validated questionnaires (PFDI-20, PFIQ-7, PISQ-12, BCS, and FGSIS) were administered to the patients preoperatively and at 3, 6, and 12 months postoperatively. The patient's impression of improvement was evaluated with PGI-I.

RESULTS

During the study period, 130 patients underwent a hysterectomy (Table 1). The pelvic floor and sexual functions improved significantly (PFDI-20: 77.52 ± 52.56 vs. 37.09 ± 29.95, p<0,001; PISQ-12: 31.36 ± 5.55 vs. 34.02 ± 3.76, p<0,001) at the first follow-up visit, and this improvement persisted throughout the follow-up period (Table 2). At one-year follow-up, 84.6% of women's perceptions of improvement were very much or much better.

INTERPRETATION OF RESULTS

Of note, not only PFDI-20 and PISQ-12 showed no deterioration after the hysterectomy, but also no decline was observed at the pelvic floor-related quality of life, body perception, and genital self-image. After hysterectomy with laparoscopy, women were more satisfied with their body image [6 (-55-52) vs. 1 (-47-57), p = 0,035].

CONCLUSIONS

Benign hysterectomy seems to improve pelvic floor functions without having a negative effect on quality of life, sexual function, body perception, and genital self-image.

REFERENCES (max. 3)

1. Forsgren C, Amato M, Johannesson U. Effects of hysterectomy on pelvic floor function and sexual function-A prospective cohort study. Acta Obstet Gynecol Scand. 2022 Oct;101(10):1048-1056.

Age	49 ± 6,5
Age	47 ± 0,5
BMI (kg/m²) (Body-mass index)	28,8 ± 5,7
Parity	2,2 ± 1,2
Menopausal status, n (%)	
	97 (74,6)
Premenopausal	33 (25,4)
Postmenopausal	
Smoker, n (%)	
Yes	88 (67,7)
No	42 (32,3)
Main symptom on admission, n (%)	
Abnormal uterine bleeding	82 (63,1)
Pelvic pain	34 (26,1)
Other	14 (10,8)
Indications for hysterectomy, n (%)	
Leiomyoma	70 (53,8)
Adenomyosis	16 (12,3)
Other*	44 (33,8)
Uterine volume (ml)	206,5 ± 202,8
Type of operation, n (%)	
ТАН ()	76 (58,5)
	54 (41,5)
TLH	

Table 1. Baseline characteristics of the study population (n=130)

Precancerous lesions, BRCA mutation carrier, Chronic pelvic pain; TAH: Total abdominal hysterectomy; TLH: Total laparoscopic hysterectomy.

	Pre-op	3 months	6 months	12 months	P ^{0-12, a}
PFDI-20	77.52±52.56	37.09±29.95	37.16±32.34	35.46±27.59	<0.001
PFIQ-7	37.88±46.98	32.27±37.52	29.78±33.53	38.46±37.00	>0.005
PISQ-12	31.36±5.55	34.02±3.76	31.36±5.55	31.23±7.26	>0.005
BCS	138,91±21,76	138,64±14,50	139,40±14,34	142,13±13,87	>0.005
FGSIS	18,50±3,79	18,15±2,85	18,62±2,89	19,18±2,82	>0.005

PFDI-20: Pelvic Floor Distress Inventory-Short Form; PFIQ-7: Pelvic Floor Impact Questionnaire; PISQ-12: Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire; FGSIS: The Female Genital Self-Image Scale; BCS: Body-Cathexis Scale; a: Repeated Measures Analysis of Variance (ANOVA) test between different time measurements. **Table 2.** The mean scores of the validated questionnaires during the follow-up period

Uterine artery embolization for postpartum and postabortal hemorrhage: our outcomes

<u>Polona Vihtelič</u>⁽¹⁾ - Nataša Kenda Šuster⁽²⁾ - Eva Skuk⁽²⁾ - Marina Jakimovska Stefanovska ⁽²⁾ - Peter Popovič⁽¹⁾

Clinical Institute of Radiology,, University Medical Center, Ljubljana, Slovenia ⁽¹⁾ - Division of Obstetrics and Gynecology, University Medical Center, Ljubljana, Slovenia ⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

Pathologic primary postpartum hemorrhage (PPH) involves excessive blood loss during childbirth, defined as over 500 ml for vaginal deliveries and over 1000 ml for Cesarean births. ysterectomy has traditionally been considered as definitive management in patients refractory to conservative treatment. Postabortion delayed hemorrhage often results from retained products of conception (RPOC). Hysteroscopic resection is the standard procedure for removing retained tissue, but in some cases, increased vascularity can lead to massive hemorrhage requiring a life-saving hysterectomy. Uterine artery embolization (UAE) is accepted as the standard treatment for rapidly controlling acute obstetric hemorrhage in various clinical situations.

Aim of our study was to evaluate the safety and efficacy of UAE for the treatment of primary postpartum hemorrhage and to reduce bleeding and the possibility of hysterectomy during surgical removal of the post-abortion retained placenta.

MATERIALS AND METHODS

Our retrospective study was conducted from 2012 to 2022, involving 64 women who underwent uterine artery embolization. The women were divided into two groups: 46 women underwent elective embolization to reduce vascularity and bleeding risk during surgical removal of post-abortion retained tissue. In the second group, 18 women received emergency embolization for medically refractory hemorrhage during abortion or delivery to stop bleeding and avoid emergency hysterectomy in patients who wished to preserve fertility.

RESULTS

In the elective group, we successfully performed all embolization procedures using absorbable gelatine sponges without post-procedural complications. There were no life-threatening hemorrhages during the surgical intervention that followed (median blood loss was 200 ml), and no hysterectomies were required. In the emergency group, we successfully stopped the bleeding in 16 patients (89% of cases). Unfortunately, in two patients with significant blood loss (more than 2000 ml) embolization was unsuccessful in achieving hemostasis, leading to persistent bleeding and ultimately requiring a hysterectomy.

INTERPRETATION OF RESULTS and CONCLUSIONS

Uterine artery embolization is a safe and effective procedure for controlling postpartum hemorrhage and preventing hysterectomy in patients with postabortal retained tissue. Therefore, it is recognized as a fertility-sparing treatment and a promising option for patients who wish to conceive in the future. Early cooperation between obstetricians and interventional radiologists is associated with the improving outcomes of UAE.

REFERENCES (max. 3)

- Bazeries P, Paisant-Thouveny F, Yahya S, et al. Uterine Artery Embolization for Retained Products of Conception with Marked Vascularity: A Safe and Efficient First-Line Treatment. Cardiovasc Intervent Radiol. 2017 Apr;40(4):520-529. doi: 10.1007/s00270-016-1543-7.
- Ohmaru-Nakanishi T, Kuramoto K, Maehara M, Takeuchi R, Oishi H, Ueoka Y. Complications and reproductive outcome after uterine artery embolization for retained products of conception. J Obstet Gynaecol Res. 2019 Oct;45(10):2007-2014. doi: 10.1111/jog.14067.
 - Kimura Y, Osuga K, Nagai K, et al. The efficacy of uterine artery embolization with gelatin sponge for retained products of conception with bleeding and future pregnancy outcomes. CVIR Endovasc. 2020 Feb 12;3(1):13. doi: 10.1186/s42155-020-00107-4.

Clinical characteristics and sexual function in women with clinically nonsignificant pelvic organ prolapse complaining of vaginal laxity

```
Serife Esra Cetinkaya <sup>(1)</sup> - Mehmet Murat Seval <sup>(1)</sup> - <u>Elif Nazli Cetindag</u> <sup>(2)</sup> - Bulut Varli <sup>(1)</sup> - 
Fulya Dokmeci <sup>(1)</sup>
```

School of Medicine, Department of Obstetrics and Gynecology, Ankara University, Ankara, Turkey ⁽¹⁾ - Graduate School of Health Sciences, Urogynecology Doctorate Programme, Ankara University, Ankara, Turkey ⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

Vaginal laxity (VL) is a common but 'poorly characterised' complaint impairing sexuality (1), with, however, controversial results regarding age, parity and POP (1-3). The aim of this study was to reveal the clinical characteristics of women with nonsignificant POP complaining of VL, and its impact on sexual function.

MATERIALS AND METHODS

In the retrospective analysis of women with pelvic floor dysfunction and nonsignificant POP (POPQ stage 0&1) (n=277), records were reviewed according to the presence (n=59) and absence (n=218) of VL. Baseline characteristics, PFDI-20 and PISQ-12 scores, and clinical findings were compared using the Students-t or Mann-Whitney U tests, where appropriate.

RESULTS

Women with VL were younger and postmenopausal status was less prevalent. The most significant complaint associated with VL was found to be vaginal flatus (66% vs 13%, p<0.001). The scores of the physical segment of the PISQ-12 were significantly lower (median 12 vs 16, p=0.003), and Ap&Bp were significantly closer to hymen in women with VL (p=0.029 and p=0.04, respectively) (Table1).

INTERPRETATION OF RESULTS

Women with nonsignificant prolapse and VL seem to suffer more from vaginal flatus and coital incontinence. Sexual dysfunction and avoidance of sexual activity due to vaginal bulging were more prevalent.

CONCLUSIONS

VL seems to be associated with pelvic floor related sexual dysfunction.

REFERENCES (max. 3)

- 1. Pereira GMV, Brito LGO, Ledger N, Juliato CRT, Domoney C, Cartwright R. Associated factors of vaginal laxity and female sexual function: a cross-sectional study. J Sex Med 2024 Apr. Doi: 10.1093/jsxmed/qdae042. Online ahead of print.
- 2. Polland A, Duong V, Furuya R, et al. Description of Vaginal Laxity and Prolapse and Correlation with Sexual Function (DeVeLoPS). Sex Med 2021; 9:1004433.
- 3. Talab S, Al-Badr A, AlKusayer GM, Dawood A, Bazi T. Correlates of vaginal laxity symptoms in women attending a urogynecology clinic in Saudi Arabia. Int J Gynecol Obstet 2019; 145: 278-282.

5

Clinical characteristics	VL (+)	VL (-)	р
	N=59	N=218	1-
Age (years), mean±SD	47±7	54±12	< 0.001
Post-menopausal, n (%)	20 (34)	142 (65)	< 0.001
Body mass index (kg/m²), mean±SD	28±4	29±5	0.707
Parity, mean±SD	2.3±1.0	2.2±1.5	0.746
Vaginal delivery, n (%)	50 (85)	183 (84)	0.881
Smoking, n (%)	17 (29)	51 (23)	0.390
Hypertension, n (%)	16 (27)	76 (35)	0.262
Diabetes mellitus, n (%)	15 (25)	47 (22)	0.527
Previous anti-incontinence surgery, n (%)	7 (12)	13 (6)	0.120
PFDI-20 total	28.5 (3-61)	23 (1-63)	0.108
POPDI-6	8 (1-24)	5 (0-16)	0.150
CRADI-8	7 (0-23)	6 (0-21)	0.383
UDI-6 total	15 (2-24)	12 (0-21)	0.040
-Irritative	6 (1-8)	5 (0-8)	0.231
-Stress	5 (0-8)	5 (0-8)	0.239
-Obstructive	4 (0-8)	2 (0-8)	0.009
PISQ-12 total	30 (8-39)	32 (8-46)	0.003
PISQ-12 (Behavioral-emotive)	7 (0-14)	8 (0-15)	0.336
PISQ-12 (Physical)	12 (2-20)	16 (2-20)	0.003
PISQ-12 Q5*	2 (0-4)	2 (0-4)	0.626
PISQ-12 Q6*	3 (0-4)	4 (1-4)	< 0.001
PISQ-12 Q7*	2 (0-4)	4 (0-4)	< 0.001
PISQ-12 Q8*	3 (0-4)	4 (0-4)	0.002
PISQ-12 (Partner-related)	9 (0-12)	9 (1-12)	0.526
Complaint of vaginal flatus at direct questioning, n	39 (66)	29 (13)	< 0.001
(%)			
Modified Oxford Scale	2.6±0.9	2.7±1.1	0.611
Positive cough stress test	25 (42)	105 (48)	0.429
Positive Q-tip test	42 (71)	118 (54)	0.018
POPQ			
-Aa	-2.42±0.49	-2.39±0.54	0.710
-Ba	-2.39±0.54	-2.39±0.49	0.813
-C	-5.66±0.95	-5.61±0.91	0.683
-D	-6.44±1.16	-6.33±1.03	0.461
-Ар	-2.37±0.48	-2.53±0.50	0.029
-Вр	-2.37±0.52	-2.53±0.52	0.04
-GH	2.91±0.80	2.88±0.90	0.784
-Pb	3.60±1.28	3.45±0.7	0.384
-TVL P<0.05 statistically significant	7.58±0.95	7.49±0.72	0.432

Table 1. The clinical characteristics of women with nonsignificant POP according to the presence of VL

P<0.05 statistically significant

PFDI-20: Short form of the Pelvic Floor Distress Inventory, POPDI-6: Short form of the Pelvic Organ Prolapse Distress Inventory, CRADI-8: Short form of the Colorectal Anal Distress Inventory, UDI-6: Short form of the Urinary Distress Inventory, PISQ-12: Short form of the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire

*Q5: Do you feel pain during sexual intercourse?, Q6: Are you incontinent of urine (leak urine) with sexual activity?, Q7: Do es fear of incontinence (either stool or urine) restrict your sexual activity?, Q8: Do you avoid sexual intercourse because of bulging in the vagina (either the bladder, rectum or vagina falling out?)?

Practice and Experience of Obstetric Care Providers in the Management of Obstetric Anal Sphincter Injuries in Middle Eastern Countries.

Diaa Rizk⁽¹⁾

Arabian Gulf University, College of Medicine and Medical Sciences, Clinical Research Centre, Manama, Bahrain ⁽¹⁾

Authors: Diaa RIZK, Angeleena ESTHER, Hussain AlHAFNAWY, Clinical Research Centre, Arabian Gulf University, Bahrain ; Katarzyna BORYCKA, Centre of Postgraduate Medical Education, Department of General and Colorectal Surgery, Warsaw, Poland; Stefano SALVATORE, University Vita e Salute, IRCCS San Raffaele, Milan, Italy ; Andrea STUART, Department of Obstetrics and Gynaecology, Lund, and Department of Gynaecology, Helsingborg, Sweden; Stavros ATHANASIOU, Kapodistrian University of Athens, Greece; Jan BAEKELANDT, Imelda Hospital, Bonheiden, Belgium; Adam DZIKI, Medical University of Łódź, Poland; Ruwan FERNANDO, St Mary's Hospital, London, United Kingdom; Rita FRANCO, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy; Mariusz GRZESIAK and Przemysław OSZUKOWSKI, Institute of Polish Mother's Health Centre, Łódź, Poland; Hynek HEŘMAN, Institute for the Care of Mother and Child, Prague, Czech Republic; Carlo RATTO, Fatebenefratelli Gemelli Isola Hospital Rome, Italy;; Renaud DE TAYRAC, CHRU Carémeau, Nîmes, France; Antonino SPINELLI, Humanitas University, Milan, Italy.

Corresponding Author: Diaa RIZK

Presenting Author: Diaa RIZK

Funding: OASIS Diagnostics SA, Warsaw, Poland.

BACKGROUND

Obstetric anal sphincter injuries (OASIS) are a serious complication of vaginal deliveries causing significant morbidity and long-term consequences for women, particularly fecal incontinence.

OBJECTIVES

To explore the current practice, experience, challenges, and strategies related to the management of OASIS in a representative sample of obstetric care providers (obstetricians, obstetric nurses, and midwives) working in Middle Eastern countries.

MATERIALS AND METHODS

A cross-sectional, online questionnaire-based study was conducted on a representative sample of healthcare professionals directly involved in obstetric care and the management of vaginal delivery-related OASIS (obstetricians, obstetric nurses, and midwives). The questionnaire included a mix of quantitative and qualitative data and covered demographic and professional background, maternity care practices, specific protocols for OASIS detection, training and education, interdisciplinary collaboration as well as challenges faced in the management of OASIS.

RESULTS

The findings reported here represent the first 223 responders out of the total 520 subjects recruited for this study (43%). The majority were obstetricians (128, 57.4%), followed by midwives (49, 22%), resident trainees (24, 10.8%), obstetric nurses (18, 10.8%), and urogynecologists (4, 1.8%). 53.8% reported that assessing risk factors for OASIS is not a standard practice in their hospitals. 67% of respondents reported that their hospitals had protocols in place for perineal protection during vaginal deliveries. Digital rectal examination (DRE) emerged as the most frequently reported method (85%) for the detection of OASIS followed by endoanal ultrasound (7.5%) and magnetic resonance imaging (2.6%). Notably, a few respondents (4.9%) were not sure

about the methods used to detect OASIS in their respective hospitals/clinics. 132 (59.2%) subjects considered DRE to be a sufficient diagnostic tool for OASIS detection. Training for obstetric care providers was inadequate: only 41% received formal training sessions, 25.1% relied on on-thejob training, and the remaining 33.6% had no training in OASIS management. Primary repair was the most common surgical intervention (89.2%) for the management of OASIS. 6.3% of obstetric care providers referred their patients to specialized centers, while 3.1% and 1.4% performed secondary and late repair respectively. Following OASIS repair, 75% of obstetric care providers conducted in-person follow-up appointments. However, endoanal ultrasound monitoring was used in only 48% of these visits. Telemedicine was used by 11% of the remaining 25% of respondents, while 14.3% of respondents reported not following up with patients after OASIS repair. 75.3% of obstetric care providers lacked awareness of the recent Sultan classification system of OASIS. Only 36% of participants reported having heard about occult OASIS after vaginal delivery. A high proportion of respondents (68.6%) reported that their institutions did not provide any specific training on OASIS management, thus identifying a potential knowledge gap in caring for patients with OASIS. Interdisciplinary collaboration between obstetricians and colorectal surgeons emerged as a critical area for improvement, with only 54% reporting collaboration in their institutions for optimal OASIS care. Most obstetric care providers (71%) lacked awareness of existing national or institutional guidelines for the management of OASIS.

CONCLUSION

There is an urgent need for developing standardized protocols and national guidelines for obstetric care providers in Middle Eastern countries regarding the detection, training, and management of OASIS in order to improve maternity care services.

7

Vaginal Vault Dehiscence

The Urogynaecologist approach

Safwat Tosson⁽¹⁾

Betsi Cadawaldar Uivesity Health Board, Bangor University, Bangor, United Kingdom ⁽¹⁾

INTRODUCTION AND AIM OF THE STUDY

Vaginal Vault Dehiscence (VVD) is rare complication of total hysterectomy as a result of the separation of the anterior and posterior vaginal walls.

Evisceration of the abdominal contents through the vaginal opening leading to peritonitis, intestinal injury, necrosis and sepsis.

Incidence: 0.14% up to 5%

MATERIALS AND METHODS

A 44 years woman tourist who had a Total laparoscopic hysterectomy 3 months prior to her visit to our part of the world.

She presented to the emergency department as her small intestine had protruded outside of the vagina following resuming marital relations.

She was admitted to the hospital. On clinical examination the small intestine and omentum were outside of the vulva. As the intestine looked health, she was fitted with a Foley's catheter, the intestine and omentum were pushed back into the abdominal cavity. She was given intra venous antibiotics.

On Monday morning, we are able to telephone her surgeon, she underwent TLH for fibroid uterus and endometriosis excision.

We agreed I to try vaginal approach to repair VVD as the family was returning home 3 days later. She had spinal anaesthesia and sedation.

In theatre the vagina was health and well supported, however the vaginal edge was very friable. The vagina was repaired by a transverse continuous suture no 1 impregnated with antibiotics.

RESULTS

The following day she was well, passed urine and discharged. The family went home as planned. A month later she contiuned to be well

INTERPRETATION OF RESULTS

Vaginal repair of complete VVD is feasable, quick and less expensive

CONCLUSIONS

The Urogynaecologist approach to manage VVD is cost effective less invasive

REFERENCES (max. 3)

Urodynamic alterations in patients with multiple sclerosis and detrusor overactivity undergoing percutaneous posterior tibial nerve stimulation: a pilot study

<u>Athanasios Zachariou</u>⁽¹⁾ - Vaia Sapouna⁽²⁾ - Athanasios Zikopoulos⁽¹⁾ - Styliani Papakosta⁽²⁾ - Dimitrios Zachariou⁽²⁾ - Aris Kaltsas⁽³⁾ - Ioannis Giannakis⁽¹⁾ -Tian Mai Ba Dung⁽⁴⁾ - Cam Hoang Nguyen Phuc⁽⁵⁾ - Nikolaos Sofikitis⁽¹⁾

Department of Urology, Faculty of Medicine, School of Health Sciences, University of Ioannina, Ioannina, Greece ⁽¹⁾ - Physical Medicine and Rehabilitation Centre Kentavros, Urology Outpatient Department, --, Volos, Greece ⁽²⁾ - Third Department of Urology, Attikon University Hospital, School of Medicine, National and Kapodistrian University of Athens, Athens, Greece ⁽³⁾ - Department of Andrology, Binh Dan Hospital, -, Ho Chi Minh City, Viet Nam ⁽⁴⁾ - Department of Urology, Binh Dan Hospital, --, Ho Chi Minh City, Viet Nam ⁽⁵⁾

INTRODUCTION AND AIM OF THE STUDY

Among multiple sclerosis (MS) patients, neurogenic detrusor overactivity (NDO) is the principal urodynamic diagnosis, occurring in approximately 65% of cases. Posterior tibial nerve stimulation (PTNS) is a neurostimulation technique used effectively to treat urinary disorders (1). The aim of this study was to investigate the urodynamic outcomes of PTNS implementation in individuals suffering from MS, NDO and failed anticholinergic treatment.

MATERIALS AND METHODS

In this pilot study, 25 participants were included, comprising ten males and 15 females. All patients were diagnosed with both MS and NDO. All patients followed a protocol consisting of twelve weekly sessions of PTNS after anticholinergic treatment failed. Urodynamic assessments were conducted before and after the last PTNS treatment. Comparisons were made between the mean urine volume at the first sensation, the mean volume of the first involuntary detrusor contraction and the maximum cystometric capacity before and after the PTNS sessions.

RESULTS

The average volume of the first sensation as observed in filling cystometry was 95.25 ± 12.68 and after PTNS sessions, it was increased to 142.34 ± 18.71 . The average volume in initial involuntary detrusor contraction as observed in standard cystometry was 123.84 ± 16.94 ml and after PTNS treatment, this volume increased to 187.88 ± 32.68 ml. Similarly, the mean maximum cystometric capacity measured through filling cystometry was 181.74 ± 36.73 ml, whereas after stimulation, it reached 257.43 ± 42.69 ml. All these alterations in the first sensation urine volume, the volume at the initial involuntary detrusor contraction and maximum cystometric capacity were found to be statistically significant after PTNS stimulation.

INTERPRETATION OF RESULTS

While the exact mechanism remains ambiguous, Caldwell proposed that electrical stimulation of the tibial nerve might suppress detrusor activity by depolarizing somatic sacral and lumbar afferent fibers (2). Long-latency somatosensory evoked potentials may participate in stimulus processing (3).

CONCLUSIONS

These finding clearly establish statistically significant results of PTNS sessions on urodynamic parameters, affirming their efficacy.

REFERENCES (max. 3)

- Sapouna V, Zikopoulos A, Thanopoulou S, Zachariou D, Giannakis I, Kaltsas A, Sopheap B, Sofikitis N, Zachariou A. Posterior tibial nerve stimulation for the treatment of detrusor overactivity in multiple sclerosis patients: a narrative review. J of Personalized Medicine 2024, 14, 355.
- 2. Caldwell KP. The electrical control of sphincter incompetence. Lancet. 1963 27;2(7300):174-5.
- 3. Finazzi-Agrò E, Rocchi C, Pachatz C, Petta F, Spera E, Mori F, Sciobica F, Marfia GA. Percutaneous tibial nerve stimulation produces effects on brain activity: study on the modifications of the long latency somatosensory evoked potentials. Neurourol Urodyn. 2009;28(4):320-4.

A randomized controlled trial on the efficacy of laser CO2 and mirabegron as cotherapy in the management of overactive bladder

<u>Dimitrios Zacharakis</u>⁽¹⁾ - Konstantinos Kypriotis⁽¹⁾ - Anastasia Prodromidou⁽¹⁾ - Nikolaos Kathopoulis⁽¹⁾ - Dimos Sioutis⁽²⁾ - Lina Michala⁽¹⁾ - Stavros Athanasiou⁽¹⁾ - Themos Grigoriadis⁽¹⁾

Urogynecology Unit, 1st Department of Obstetrics and Gynecology, National and Kapodistrian University of Athens, 'Alexandra' General Hospital, Athens, Greece ⁽¹⁾ - 3rd Department of Obstetrics and Gynecology, National and Kapodistrian University of Athens, University General Hospital "ATTIKON", Athens, Greece ⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

Overactive bladder (OAB) is characterized by urinary urgency, frequency, nocturia, with/without incontinence in the absence of infection or other pathology. Prevalence increases with age, particularly in postmenopausal women, affecting quality of life. The therapeutic efficacy of the currently available treatments varies significantly and highlights the need for novel therapeutic approaches. We aimed to compare the efficacy of fractional CO2 laser combined with the β 3-adrenoceptor agonist mirabegron versus mirabegron alone in the management of OAB in postmenopausal women.

MATERIALS AND METHODS

This double-blind, randomized controlled trial involved postmenopausal women with OAB symptoms. Participants were randomized to receive either vaginal CO2 laser therapy or sham treatment, alongside daily mirabegron (50 mg). Patients received 3 monthly treatments. Outcomes were measured using validated tools including the Overactive Bladder Questionnaire (OAB-q) as well as a 3-day voiding diary.

RESULTS

Fifty women were randomized into two groups of 25 each. Both groups showed significant improvements in OAB symptoms over time. Daily frequency, urgency, nocturia, and incontinence episodes decreased significantly in both groups from baseline to follow-up. However, no significant differences were observed between the laser therapy and sham groups in any of the outcomes.

INTERPRETATION OF RESULTS

Both treatments effectively reduced OAB symptoms, the addition of fractional CO2 laser therapy did not provide significant benefits over mirabegron monotherapy.

CONCLUSIONS

Fractional CO2 laser therapy does not significantly enhance the therapeutic effects of mirabegron in managing OAB symptoms in postmenopausal women. While promising for GSM, its benefits for OAB remain unproven. Future research should involve large randomized studies to clarify the role of CO2 laser in OAB treatment, particularly in women with severe vaginal atrophy.

REFERENCES (max. 3)

Okui N. Efficacy and safety of non-ablative vaginal erbium: YAG laser treatment as a novel surgical treatment for overactive bladder syndrome: comparison with anticholinergics and β 3-adrenoceptor agonists. World J Urol. 2019;37(11):2459-66.

Aguiar LB, Politano CA, Costa-Paiva L, Juliato CRT. Efficacy of Fractional CO(2) Laser, Promestriene, and Vaginal Lubricant in the Treatment of Urinary Symptoms in Postmenopausal Women: A Randomized Clinical Trial. Lasers Surg Med. 2020;52(8):713-20.

Perino A, Cucinella G, Gugliotta G, Saitta S, Polito S, Adile B, et al. Is vaginal fractional CO2 laser treatment effective in improving overactive bladder symptoms in post-menopausal patients? Preliminary results. Eur Rev Med Pharmacol Sci. 2016;20(12):2491-7.

9

Evaluation of the necessary time needed for bladder management in multiple sclerosis patients.

<u>Athanasios Zachariou</u>⁽¹⁾ - Vaia Sapouna⁽²⁾ - Athanasios Zikopoulos⁽¹⁾ - Styliani Papakost⁽²⁾ - Dimitrios Zachariou⁽²⁾ - Aris Kaltsas⁽³⁾ - Ioannis Giannakis⁽¹⁾ - Tien Mai Ba Dung⁽⁴⁾ - Cam Hoang Nguyen Phuc⁽⁵⁾ - Nikolaos Sofikitis⁽¹⁾

Department of Urology, Faculty of Medicine, School of Health Sciences, University of Ioannina, Ioannina, Greece ⁽¹⁾ - Physical Medicine and Rehabilitation Centre Kentavros, Urology Outpatient Department, Volos, Greece ⁽²⁾ - Third Department of Urology, Attikon University Hospital, School of Medicine, National and Kapodistrian University of Athens, Athens, Greece ⁽³⁾ - Department of Andrology, Binh Dan Hospital, Ho Chi Minh City, Viet Nam ⁽⁴⁾ - Department of Urology, Binh Dan Hospital, Ho Chi Minh City, Greece ⁽⁵⁾

INTRODUCTION AND AIM OF THE STUDY

Multiple sclerosis (MS) is frequently related to lower urinary tract symptoms (LUTS). Clean intermittent catheterization (CIC), indwelling catheters, condom catheters, and voiding in diapers represent real-world ways of bladder drainage in MS patients (1). The time burden associated with bladder management in MS patients is not well described. This study evaluated the self-reported time spent on these clinical drainage approaches in MS patients.

MATERIALS AND METHODS

A prospective, single-centre study included 92 patients suffering from MS and bladder drainage problems. All patients were evaluated for the necessary self-reported time to perform bladder management tasks. The research team considered the caregiver's presence, the total number of daily voids or CIC, the urinary bag changes and the incontinence episodes with the consequent cleaning tasks. A control group included 35 volunteers without urinary issues.

RESULTS

83 patients responded to the survey. CIC was the most common bladder management (41 patients), with men and women presenting similar average times for each catheterization task (8.8 vs 9.1 min, p>0.05). Obese women and females requiring a caregiver showed longer catheterization times. Diaper use was the most time-consuming when estimating each patient's total time on bladder management (58.7 min per day). CIC patients needed 54.8 min per day for a mean number of 5.9 catheterizations per day. Patients with indwelling catheters required the least time (22.4 min, p<0.05), while patients with condom catheters reported an average time of 28.1 min per day. The healthy volunteers presented an average daily time of 7.5 min for bladder management.

INTERPRETATION OF RESULTS

The CIC preparations and personal hygiene in patients with diapers are obvious more time consuming than other ways of bladder drainage in MS patients.

CONCLUSIONS

Management of neurogenic bladder in MS patients, especially those performing CIC or using a diaper, is time-consuming (2, 3). Although urologists rarely mention this to patients, time may play a role in long-term bladder management decisions.

REFERENCES (max. 3)

- Ginsberg DA, Boone TB, Cameron AP, Gousse A, Kaufman MR, Keays E, et al. The AUA/SUFU Guideline on Adult Neurogenic Lower Urinary Tract Dysfunction: Treatment and Follow-up. Journal of Urology, 2021;206(5):1106–13.
- 2. Herbert AS, Welk B, Elliott CS. Internal and External Barriers to Bladder Management in Persons with Neurologic Disease Performing Intermittent Catheterization. Int. J. Environ. Res. Public Health 2023;20:6079.
- 3. Velaer KN, Welk B, Ginsberg D, Myers J, Shem K, Elliott C. Time burden of bladder management in individuals with spinal cord injury. Top Spinal Cord Inj Rehab 2021;27:83-89.

10

Mini-review on historical progress of physiotherapeutic techniques for the management of urinary incontinence

<u>Diamantis Floratos</u>⁽¹⁾ - Leonidas Floratos⁽²⁾

Private Urodynamic clinic, Private Urodynamic Practice, Athens, Greece ⁽¹⁾ - Physiotherapist, Medical School National and Kapodisrtian University of Athens, Athens, Greece ⁽²⁾

INTRODUCTION AND AIM OF THE STUDY

The presentation of historical progress of urinary incontinence (UI) management using physiotherapeutic techniques, since antiquity.

MATERIALS AND METHODS

Review of English literature was performed through PubMed, and manual search of historical references from the official site of International Continence Society (ICS), books and the National Library of Medicine, about the evolution of pelvic floor muscle (PFM) training, for the management of UI.

RESULTS

Initially, PFM training applied in the early antiquity, with Hippocrates and Galen using these programs for general health improvement. The scientific approach of PFM training starts during mid-1800's in Sweden. In 1936, Miss M. Randel introduced PFM exercises for women in the maternity ward, and Miss M. Morris, developed an exercise program, focusing on the conscious contraction and relaxation of PFM. Prof A. Kegel, being the "father" of PFM training, established Kegel's exercises as regular practice in 1948. At the 70's, D. Mandelstam, developed the new physiotherapy internship and physiotherapist Dr Jo Laycock became Board Member of ICS.

During the last 25 years, indications of PFM exercises has been expanded to patients with urinary incontinence post- radical prostatectomy (open, laparoscopic, robot-assisted) *and the value of this approach has been proved, leading this technique to be highly* recommended by various international societies (EAU, ICS).

CONCLUSIONS

The evolution of ancient empirical techniques and the subsequent scientific progress of the last 150 years have rendered the specialist pelvic floor physiotherapists important members of the multidisciplinary team, responsible for the management of patients with UI.

REFERENCES (max. 3)

1. Haslam J: Historical Perspective of Pelvic Floor Muscle Training. In: J. Haslam and J. Laycock, editor. Therapeutic Management of Incontinence and Pelvic PainLondon. 2008, 85:10.1007/978-1-84628-756-5_11.

2. Floratos D.L., Rapidou CA, Alivizatos G, et al.: Behavioral methods in early management of incontinence after radical prostatectomy. Eur Urol. 1999, 35:465. 10.1159/isbn.978-3-318-06207-6

3. Abrams P, Andersson KE, Apostolidis A, et al.: 6th International Consultation on Incontinence. Recommendations of the International Scientific Committee: Evaluation and treatment of urinary incontinence, pelvic organ prolapse, and fecal incontinence. Neurourol Urodyn. 2018, 37:2271-2. 10.1002/nau.23551

Bilateral hidronephrosis caused by giant rectosigmoid fecaloma

<u>Alejandro Sousa</u>⁽¹⁾ - Maria Alvarez⁽²⁾- Daniel Sousa⁽²⁾ - Maria Enma Rodriguez⁽²⁾ - Juan León⁽²⁾

Chief of service. Comarcal Hospital of Monforte, Lugo, Spain⁽¹⁾ - Sergas, Lugo-Spain⁽²⁾

INTRODUCTION

In some patients, such as those with neurological conditions and the elderly, constipation constitutes an important health problem, although the majority of these patients can be treated in primary care consultations.

A subgroup of patients with chronic constipation may present in a more severe form, and there are even cases in the literature of fecalomas that have presented megacolon as a complication, with some cases requiring surgery which is not exempt from mortality.

CLINICAL CASE

77-year-old institucionalized woman with chronic constipation who was attended due to abdominal pain extended for a week. Creatinine of 2.13 mg/dl. The CT showed a large fecaloma that occupied the rectal ampulla, the sigmoid and descending colon measuring 28x14x12 cm (craniocaudal, anteroposterior and lateral), causing displacement and compression of the uterus and bladder which produces urinary retention and secondary bilateral hydronephrosis (fig-1). Patient developed pulmonary edema, atrial fibrillation being exitus despite treatments applied

CONCLUSIONS

Constipation is one of the most frequent causes of consultation in primary care. In some patients, cases of fecal impaction that are resistant to the usual treatments may occur, but it is very rare for other organs to deteriorate due to it that eventually may cause patient death.

REFERENCES

1.- Caiazzo P, et al. Megacolon for a giant faecaloma with unlucky outcome. Case report and review of the literature. Ann Ital Chir. 2013; 84:319-22.

2.- Gonzalez F. Obstructive uropathy caused by fecal impaction: Report of 2 cases and discussion. Am J Hosp Palliat Care. 2010; 27:557-9.

3.- Knobel B, et al. Bilateral hydronephrosis due to fecaloma in an elderly woman. J Clin Gastroenterol. 2000; 30:311-3.

Misuse of antibiotics in the treatment of RUTI in primary care and emergency departments

<u>Alejandro Sousa (1)</u> - Maria Alvarez⁽²⁾- Daniel Sousa⁽²⁾ - Maria Enma Rodriguez⁽²⁾ - Juan León⁽²⁾

Chief of service. Comarcal Hospital of Monforte, Lugo, Spain⁽¹⁾ - Sergas, Lugo-Spain⁽²⁾

INTRODUCTION

Investigate the main causes of inadequate antibiotic treatments that are prescribed both in primary care and in hospital emergency services for the treatment of recurrent urinary tract infections (RUTI).

MATERIALS AND METHODS

The clinical records of all patients who were referred to the urology service of our hospital, between May 2023 to May 2024, for control of RUTI after having been treated with various antibiotic regimens have been reviewed. All possible causes of incorrect use of antibiotics in these patients have been assessed.

RESULTS

Among the 235 patients studied, the indication for the use of antibiotics could be avoided, replaced or delayed were detected in 82 cases. The causes of possible inappropriate antibiotic use were:

1.- Diagnosing UTI only by symptoms and urine strip (negative culture): 37 cases(45.1%)

2.- False positive urine cultures -low UFC number, multiple germs- (wrong interpretation): 8 cases(9.7%)

3.- Inappropriate urine cultures (wrong collection): 11 cases(13.4%)

4.- Long term antibiotic prophylaxis (not indicated): 17 cases(20.7%)

5.- Treating asymptomatic bacteriuria (not indicated): 9 cases(11%)

INTERPRETATION OF RESULTS:

There is enormous room for improvement in the use of antibiotics in the treatment of RUTIs by primary care and hospital emergency services.

CONCLUSIONS:

Limiting indiscriminate antibiotic treatments in RUTIs will have a positive impact on the control of antibiotic resistance.

REFERENCES

Lim LL, Bennett N. Improving management of urinary tract infections in residential aged care facilities. Aust J Gen Pract. 2022 Aug;51(8):551-557.

Piraux A, et al. Piraux A, et al. Changes in the management of urinary tract infections in women: impact of the new recommendations on antibiotic prescribing behavior in France, between 2014 and 2019. BMC Health Serv Res. 2021 Jun 28;21(1):612.

Silva A, et al. Antibiotics (Basel). 2022 Jun 3;11(6):768. Revisiting the Frequency and Antimicrobial Resistance Patterns of Bacteria Implicated in Community Urinary Tract Infections.

Experience of vesicovaginal Fistula repair in last 2 decades at a high-volume tertiary centre in India

<u>Apul Goel</u>⁽¹⁾ - Krishna Bhandari⁽¹⁾

King George's Medical University, Urology, Lucknow, India (1)

INTRODUCTION AND AIM OF THE STUDY

To share our experience of managing isolated vesico-vaginal fistula (VVF) in last 2 decades.

MATERIALS AND METHODS

Medical records of women who underwent VVF repair between 2002 and December 2023 were reviewed retrospectively. Details recorded were age, BMI, etiology, location and size of fistula. Details of previous repair were recorded. The choice of repair was according to the preference of the surgeon. The trans-vaginal repairs were done in prone position. The catheter was removed after 1-month. The women were followed 1 and 3-months after successful catheter removal.

RESULT

Total 559 women operated (Tables)

	Age (years)		32 ±8.75		
Transabdominal VVF repair(n=301)	BMI (kg/m²)		22.4±3		
	Size of fistula		2.3cmx 1.8cm		
	Location of fistula		Supratrigonal	285	94.68%
			Trigonal	16	5.32%
	Aetiology		Hysterectomy	262	87%
			LSCS	25	8.3%
				14	4.6%
	Success rate after first repair		N=268	89.0%	
	Second repair(n=11) S	Success	Transabdominal approach	4 (out of 5)	80%
			Transvaginal approach	4 (out of 6)	66.6%
		Failure	3 (out of 11)	27.2%	
	Lost to follow up		22	7.1%	
	Complications		Surgical-site infection	3	1%
			Stress incontinence	17	6%
			Urgency/urge incontinence	14	5.6%
	Age (years)		26 ±4.8		

Transvaginal VVF repair(n=189)	BMI (kg/m²)		24.4±5		
	Size of fistula		2cmx 2.2cm		
	Location of fistula		Supra-trigonal	41	21.69%
			Trigonal	148	78.31%
	Aetiology		Hysterectomy	153	80%
			Obstructed labour	36	19%
	Success rate after first repair		N=165	87.30%	
	Second repair(n=24)	Success	Transabdominal approach	9 (out of 13)	69%
			Transvaginal approach	6 (out of 11)	54%
		Failure	9		
	Complications		Stress incontinence	15	12.7%
			Urgency/urge incontinence	15	8%
			Dyspareunia	16	8.6%

	Age (years)		28 ±5.2		
aparoscopic VVF BMI (kg/m²)		23.4±5			
repair(n=69)	Size of fistula	Size of fistula			
	Location of fistula	Location of fistula		69	100%
	Aetiology		Hysterectomy	65	94%
				4	6%
	Success rate after first repair		N=65	94.20%	
	Second repair(n=4)	Success	Transvaginal approach	3 (out of 4)	75%
		Failed	1	1.4%	
	Complications	1	Urgency/urge urinary incontinence	5	7.2%

INTERPRETATION OF RESULTS

CONCLUSIONS

Single institute experience in the repair of VVF has been shared.

Management of Large Supra-trigonal Vesicovaginal Fistula- A Laparoscopic Modified O'Connor's Technique using limited Posterior Cystostomy with Rotational Bladder Flap - Our Experience

<u>Harvinder Singh</u>⁽¹⁾ - Gunjeet Kaur⁽²⁾ - Ajay Pal⁽³⁾ - Manish Kumar Agrawal⁽³⁾ - Ishleen Pahwa

King George's Medical University, Genitourinary Unit, Department of Surgery, Lucknow, India ⁽¹⁾ - Era's Lucknow Medical College, Depart.Pathology, Lucknow, India ⁽²⁾ - KGMU, Surgery, Lucknow, India ⁽³⁾ - KMC, Microbiology, Manipal, India ⁽⁴⁾

INTRODUCTION AND AIM OF THE STUDY

We report a series of patients with large Supra-trigonal vesicovaginal fistula (VVF) managed using Laparoscopic Modified O'Connor's Technique with limited posterior cystostomy & using a rotational bladder flap.

MATERIALS AND METHODS

The total 15 patients (age 24 to 35yrs) from Jan 2016 to Dec 2023 having large (2.0 to 4.2 cm) Supra-trigonal VVF was managed Laparoscopically .The bladder was opened posteriorly along the sagittal plane and further a parasagittal bladder flap was fashioned such a way to fill the fistulous defect completely without tension .Margins of bladder and vagina dissected in fistula. Vaginal defect was closed transversely & bladder defect vertically by using rotational flap and finally an omental flap was interposed.

RESULTS

Mean operative time was 120 ± 32.5 minutes. No intraoperative complications. Only 3 patients experienced postoperative Clavien grade I complications. Mean hospital stay was 10.89 ±3.38 days. Per urethral catheter was kept for 3 to 4 weeks. 6 -12 months post op follow-up was uneventful and all patients remained continent with no recurrence..

INTERPRETATION OF RESULTS

The classic open trans-vesical approach described by O'Connor and Sokol [1] included a liberal incision extending from bladder dome till fistulous tract. In our experience, the smaller size of the posterior cystotomy with fationed rotational bladder flap not only helped to reduce the operative time till fistula dissection but also allowed a quick tension free complete closure of the bladder wall in large Supratrigonal Fistula.

CONCLUSIONS

This Laparoscopic Modified O'Connor's Technique with limited posterior Cystostomy using Rotational Bladder Flap is safe and effective for management of large Supra-trigonal Vesicovaginal Fistula which always requires tension-free & water tight repair.

REFERENCES

1. Miklos J.R., Moore R.D., Chinthakanan O. Laparoscopic and robotic-assisted vesicovaginal fistula repair: a systematic review of the literature. *J Minim Invasive Gynecol*. 2015;22:727-736.

16 Standardisation of Autologous Fascial sling technique for female stress urinary incontinence

Rami Atalla⁽¹⁾ - Charlotte Foley⁽¹⁾ - Stuart Quek⁽¹⁾ - Sarah Atalla⁽²⁾

East and North Herfordshire NHS Trust, Obstetrics and Gynaecology, Stevenage, United Kingdom ⁽¹⁾ - Homerton University Hospital NHS Foundation Trust, Obstetrics and Gynaecology, London, United Kingdom ⁽²⁾

INTRODUCTION

On July 10, 2018, the UK paused the use of synthetic mesh for treating stress urinary incontinence (SUI) in women, shifting focus to non-mesh procedures like the Autologous Fascial Sling (AFS). Despite varied techniques in the literature, there was no consistent, replicable method for AFS. This study aims to standardize the AFS technique and document outcomes for comparison and replication.

OBJECTIVE

To report the outcomes of 30 AFS cases using a standardized technique, refined over years through regular audits and modifications to achieve optimal result

METHODS

30 patients with urodynamic stress incontinence, alone or with overactive bladder (OAB), were included over a 2-year period (2019-2021). Data on demographics, health (EQ-5D), and incontinence (ICIQ scores, out of 21) were collected. Two consultants performed the procedure using a simultaneous abdominal and vaginal approach:

• Procedure:

- A suprapubic incision 4 cm above the pubic bone was made to excise an 8 cm fascial sling.
- The cave of Retzius was bluntly dissected.
- A midline anterior vaginal incision over the mid-urethra followed hydro-dissection with 240 ml of fluid, and blunt dissection of the paraurethral space.
- The fascial sling was attached to 1 PDS suture at each end, passed vaginoabdominally, and tied loosely above the sheath, with adjustments for heavy physical activity.
- The vagina and abdominal wounds were closed.

RESULTS

- Patient Satisfaction:
 - o 71% very satisfied
 - o 24% satisfied
 - o 5% neutral
- ICIQ Scores:
 - Decreased from 16/21 preoperatively to 2/21 postoperatively.
- Complications:
 - o 5 patients needed temporary self-catheterization.
 - 1 required bladder Botox.
 - 1 developed an infection requiring IV antibiotics and drainage.

CONCLUSION

The standardized AFS technique showed excellent results, high patient satisfaction, and significant ICIQ score improvement. This method can be replicated in other units, enhancing overall success rates through standardization and publication of different AFS techniques.

Determination of pelvic floor discomfort levels of women diagnosed with urinary incontinence

<u>Rüveyda ölmez yalazı</u>⁽¹⁾ - Nurdan Demirci⁽¹⁾

Marmara University, Obstetrics and Gynecology Nursing, Istanbul, Turkey (1)

Urinary incontinence (UI) is a prevalent condition affecting millions of women worldwide, characterized by involuntary leakage of urine. Pelvic floor dysfunction (PFD) is often implicated in the etiology of UI, with weakened pelvic floor muscles contributing to the loss of urinary control. Despite its high prevalence and significant impact on quality of life, the relationship between UI and PFD remains complex and multifaceted. The aim of this study was to determine the pelvic floor discomfort levels of women diagnosed with urinary incontinence and to evaluate the severity, frequency and effects of this discomfort. In line with this aim, the physiologic and anatomic features of the pelvic floor as well as the effects of urinary incontinence on the pelvic floor were examined, defined and measured. This study is a descriptive exploratory design was used. A comprehensive assessment was conducted among a cohort of women diagnosed with UI, recruited from urology and gynecology clinics. The research was conducted online between November 2023 and March 2024. Data were collected by obtaining permission from the researchers. Data were collected with the "Personal Information Form, and Global Pelvic Floor Disorders Survey". The mean age of the participants was 55 years. The majority of women were married and had children . The most common UI symptoms were stress incontinence and urge incontinence. The majority of women reported moderate to severe UI symptoms. The findings of this study underscore the integral role of pelvic floor dysfunction in the pathophysiology of urinary incontinence and its impact on women's quality of life. Effective management of UI requires a comprehensive approach that addresses both urinary symptoms and underlying pelvic floor muscle weakness. Pelvic floor rehabilitation, including targeted exercises, biofeedback, and behavioral modifications, plays a central role in improving pelvic floor function and alleviating UI symptoms. Moreover, early detection and intervention for pelvic floor dysfunction are essential for optimizing treatment outcomes and preventing disease progression. In conclusion, the determination of pelvic floor dysfunction levels in women diagnosed with urinary incontinence is crucial for guiding personalized treatment strategies and optimizing patient outcomes. A multidisciplinary approach that integrates urological, gynecological, and pelvic floor rehabilitation interventions is essential for addressing the complex interplay between UI and PFD. Future research endeavors should focus on elucidating the underlying mechanisms linking UI and PFD, as well as developing innovative therapies targeting pelvic floor muscle function. By addressing pelvic floor dysfunction comprehensively, healthcare providers can improve the quality of life and functional status of women living with urinary incontinence.

18

The effect of physical activity on urinary incontinence in pregnancy: a systematic review

<u>Rüveyda Ölmez Yalazı</u>⁽¹⁾ - Nurdan Demirci⁽¹⁾

Marmara University, Obstetrics and Gynecology Nursing, Istanbul, Turkey ⁽¹⁾

This systematic review explores the impact of physical activity on urinary incontinence during pregnancy. The objective of this review is to assess the effect of physical activity on urinary incontinence in pregnant women. A systematic search of relevant databases was conducted to identify studies examining the impact of physical activity on urinary incontinence in pregnant women. The methodology and findings of the included studies were analyzed. The participants in the studies included in this review were pregnant women. Physical activity interventions were considered as interventions in the studies included in this review. Main outcome measures were used to assess the effect of physical activity on urinary incontinence in pregnant women. The review indicates that physical activity during pregnancy may have a positive impact on reducing urinary incontinence symptoms. Studies suggest that regular physical activity, particularly exercises targeting the pelvic floor muscles, can help prevent or reduce urinary incontinence in pregnancy may be beneficial in reducing urinary incontinence symptoms. However, more research is needed to better understand the specific types, duration, and intensity of physical activity that are most effective in preventing or managing urinary incontinence in pregnant women.

Transvaginal repair of vesico-vaginal fistula: our technique

Apul Goel⁽¹⁾ - Harvinder Singh Pahwa⁽²⁾

King George's Medical University, Urology, Lucknow, India (1) - King George's Medical University, Surgery, Lucknow, India (2)

INTRODUCTION AND AIM OF THE STUDY

We aim to show the video of vesico-vaginal fistula (VVF) repair using transvaginal approach.

MATERIALS AND METHODS

Over a period of last 2-decades 189 women underwent trans-vaginal repair of VVF. A 30-year old woman with history of obstructed labour developed continuous urinary incontinence 10-days after delivery. Evaluation revealed a VVF in trigonal region. The ureteral orifices were more than 1-cm away from the fistula. A transvaginal repair was planned.

RESULTS

4-months after delivery she was posted for VVF repair. Transvaginal VVF repair was done in prone position. The standard steps of surgery including the placement of labial fat flap (Martius flap) is demonstrated. The patient was discharged on post-operative day 3 with Foley catheter in situ. The Foley catheter was removed 1-month after the repair. The patient achieved complete continence. The points highlighted in the video include prone position for repair, leak test with methylene blue dye and use of Martius flap.

INTERPRETATION OF RESULTS

Successful VVF repair can be achieved by transvaginal approach.

CONCLUSIONS

Transvaginal repair remains a standard method of VVF repair. With experience, the surgical technique has evolved achieving high success rates.

Is the artificial sphincter the last solution in the treatment of SUI?

Miro Mihelic - R. Pantar

University Medical Centre Ljubljana, Urologic Department

ABSTRACT

Milions of Europeans suffer from urinary incontinence. Besides conservative treatment surgery offers solution. Established treatment for stress urinary incontinence (SUI) is to the support or relocate the urethra. When urethra is fixed (intrinsic sphincter deficiency, ISD) the second line therapy, artificial urethral sphincter (AUS) is an option. Because of surgical difficulty to dissect the area of vagina and bladder neck AUS implantation is not very popular and more single center oriented. Adverse effect of alloplastic sling and limited durability of continence led to expand the number of AUS implantations.

The detailed preoperative measures, the drawbacks and the results show promising solution and favor implantation of AUS as a first line treatment, as a second line being already established. Minimal invasive approach gives comparable results to open procedure. New device is on the horizon to be a real step forward in treating SUI.

The article gives the review of contemporary data on the subject.

Key words: artificial urinary sphincter, intrinsic sphincter deficiency, stress urinary incontinence, women

INTRODUCTION

90 million Europeans suffer from SUI. The prevalence of SUI in women of more than 40 years old is between 20% to 36%(1). Medical treatment of moderate-to-severe SUI is inferior to other treatment options.

As a first line treatment is pad, a pesary, a catheter, urethral bulking agents, midurethral mesh or autologous sling, colposuspension. Ileal conduit diversion, bladder neck suspension with Mitrofanoff catheterisable conduit are more agressive treatment options.

As a second line treatment option the artificial urinary sphincter (AUS) implantation is save, effective and durable.

AUS is not widely accepted because of surgical difficulty and lower successful outcome comparing to male implantation. American Urological Association Guidelines on the Surgical Treatment of Female Stress Incontinence states (2) »In patients with stress urinary incontinence and fixed, immobile urethra (often referred to as »intrinsic sphincter deficiency«) who wish to undergo treatment, physicians should offer pubovaginal slings, retropubic midurethral slings or urethral bulking agents.«

In favour of second line treatment is July 2020 Cumberlege report (<u>www.hqip.org.uk</u>) which currently »pauses« the mid- urethral tape (TVT, TOT) operations, valid for British Association of Urological Surgeons (BAUS). Alloplastic slings seems to have short-term effectiveness. Yet approved by FDA it warns its use for he surgical treatment of SUI due to more than 1000 reported severe side-effects (3). Failure of midurethral sling (MUS) can occur in 15% of cases and long term recurrence has been reported in up to 68,3% (4,5,).

<u>AUS</u>

These arguments and drawbacks have led to the idea that in the case of fixed urethra with SUI the AUS should remain the gold standard(6).

In 70' AUS was initially in developed for women. As early as in 1985 Keath Light and Brantley Scott implanted the first AUS in woman (7). Diokno reported a series of 32 women with failed bladder neck suspension to receive AUS with durable result for next 2,5 years and with the continence rate of 91% (8).

Today AMS 800 (Boston Scientific, Marborough, MA, USA) AUS is implanted in female patients. It consists of three components: a cuff surrounding the proximal urethra or bladder neck, a pressure regulating baloon imbeded intraabdominally or in Retzius space (standard pressure 61-70cmH2O) and a pump implanted in major labia. The cuff dimensions are larger than in men (on average 4,5cm) and are 5-10 cm in circumference.

Preoperative measures

Maximal urethral closure pressure (MUCP) should be measured preoperatively. Fixed urethra and MUCP less than 50cmH2O is defined as intrinsic sphincter deficiency (ISD). Prerequisite is sufficient cognitive function and dexterity. Extended urodynamics has no big value as poor bladder compliance, detrusor overactivity, hypersensitive bladder and reduced cystometric capacity do not affect the results (9). It is to be analysed if the same counts for women. But the correlation exists between low Valsalva leak point pressure (VLPP) and the degree of incontinence. There is no negative effect of low VLPP or pure Vasalva voiding on AUS results (9). Hostile bladder and high permanent intravesical pressure deteriorating upper urinary tract are not frequent features in women.

The risk factors for usuccessful short or long term implantation are pelvic irradiation, history of pelvic surgery (also Burch colposuspension and sacral colpopexy), neurological pathology and age more than 70 (10).

Implantation can be performed open, vaginal, laparoscopic and robotic assisted laparoscopic or extraperitoneal. Due to high complication rates (vaginal injury and infection) the vaginal access was abandoned.

After open retropubic approach the primary endpoints are complete continence (no pad), social continence (1-2 pads per day), improved continence (less than 50% pads per day compared to preoperative status), failure (same number or more pads, worse incontinence). The secondary endpoints are complications, explantations and revision-free interval.

The list of complications by percetage:

More than 10%

- Blood in the urine and stinging at urination
- Mechanical failure of the implant requring removal and replacement
- Device infection, removal and replacement
- Vaginal or urethral erosion (fistula?), removal and possible replacement

2% - 10%

- Wound infection
- Temporary insertion of urinary catheter
- Lose cuff urethral atrophy
- Early device infection (removal of the device?)
- Late device infection
- Urethral or vaginal injury during the procedure, closure and abandonment of implantation
- Persistent SUI
- De novo overactive bladder
- Permanent retention

Less than 2%

- Pain
- Inadvertent sphincter deactivation
- Labia maiora device erosion

As the dissection between bladder neck and vagina to have enough space for cuff implantation is very challenging because of short urethra and specially after previous surgical interventions robot assisted surgery offers the possibility of minimally invasive approach, better visualisation with 3D view and dexterity. It overcomes the open and laparoscopic treatment (11). The procedure is not performed in many centers. French are leading in this field.

Several single center studies have been published in recent years.

For open (12) the short-term functional outcomes after one year are: 81% continent, 9,5% improved, 7,9% unchanged. 7,9% explanted, 4,7% revised.

For open long-term (14 years) functional outcomes: 55,6% continent, 31,7% explantations (after 11,6 years), 46% revisions (after 9 years).

PERIOPERATIVE OUTCOMES:

Intraoperative complications (11,1%): bladder neck, urethral, vaginal injury.

Postoperative complications (31,7%): Clavien < 3 (28,5%), Clavien \ge 3 (3,2%).

A short follow up is not does not allow to assess serious side-effects (13).

New studies published favor minimal invasive approach, mainly robot-assisted laparoscopic AUS implantation. The continence rate was 83,3% (11). Implantation technique varies, approach from Retzius space or posterior (between vagina and bladder) to acess the bladder neck. Most common complications were infection (0%-46%), bladder neck injury (11%,(0%-46%)), urethral and vaginal injury. Erosion rate was 9% (0%-27%) (14). In one study 76%-100% of women had previous failed surgery for SUI (15). There are promising 5 years functional results: continence 78% (16) and 89% (17), explantation free rate of 74% and revision free of 40% in17 years (18).

To avoid troublesome pump activation when urinating specially in women, problems with pump erosion and continuous fixed pressure in AUS whether needed or not UroMems company put a huge effort to develop AUS adjusted to the patients needs. Modern technology enabled to develop »bionic platform using embedded smart, digital and robotic system« which collects data from the patient and creates »a treatment algorithm that is specific for each patient's needs«. This means that the pressure in the device's occlusive cuff arround the urethra is individually adjusted to the patient activities. The two piece device has a control unit implanted above the abdominal fascia connected with the occlusive cuff. When need to urinate the dedicated remote control opens the cuff. Two levels of pressure can be set and adjusted on regular checks: Baseline for everyday use and Low pressure when not active (lying down, sleeping). To avoid urinary retention or overdistension the UroTimer in the device automatically deactivates UroActive system.

In November 2022 the first UroActive was implanted in man. Until now 6 men have roboticaly implanted UroActive device. At 3 months the first report was at ICS 2023 Meeting Toronto (Abstract 259). There were no complications, no side effects and one adverse event not related to the device (UroTimer).

On July 20, 2023 the company anounced the first UroActive implanted in female patient. The robot assisted implantation was performed at La Pitié-Salpêtrière University Hospital, Paris by Professor Emmanuel Chartier-Kastler. After six months all the primary endpoints were met (successful device activaction,, rate of explants, revisions)-no complications. The patient was continent.

CONCLUSION

From all the facts it seems that the AUS is becoming not only established second line treatment but more and more the first line. With the new technology on the horizon it is promising solution for male and female patients with SUI.

REFERENCES (MAX 3)

- 1. Hunskaar S, Lose G, Sykes D, et al. The prevalence of urinary incontinence in women in four European countries. *BJU Int*. 2004;93:324-330. [PubMed] [Google Scholar]
- 2. www.auanet.org/guidelines/incontinence-stress-urinary-incontinence-(2017)
- 3. U.S. Food and Drug Administration . FDA public health notification: serious complications associated with transvaginal placement of surgical mesh in repair of pelvic organ prolapse and stress urinary incontinence. [updated 2008 October20; cited 2019 Dec] . Available from: <u>http://www.fda.gov/cdrh/safety/102008-surgicalmesh.html</u>
- Tommaselli GA, Di Carlo C, Formisano C et al: Medium-term and long-term outcomes following placement of midurethral slings for stress urinary incontinence: a systematic review and metaanalysis. Int Urogynecol J 2015; 26: 1253.
- 5. Khan ZA, Nambiar A, Morley R et al: Long-term follow-up of a multicentre randomised controlled trial comparing tension-free vaginal tape, xenograft and autologous fascial slings for the treatment of stress urinary incontinence in women. BJU Int 2015; **115:** 968.
- 6. Cour F, Le Normand L, Lapray JF, et al. Intrinsic sphincter deficiency and female urinary incontinence. Prog Urol. 2015;25(8):437-454. <u>https://www.sciencedirect.com/science/article/pii/S1166708715001037</u>
- Light JK, Scott FB. Management of urinary incontinence in women with the artificial urinary sphincter. J Urol 1985; 134: 476-478. - <u>PubMed</u>
- 8. Diokno A, Hollander J and Alderson T: Artificial urinary sphincter for recurrent urinary incontinence: indications and results. J Urol 1987; **138**: 778.

- 9. Shin D., et al. Impact of preoperative factors on recovery of continence after artificial urinary sphincter implantation in postprostatectomy incontinence Prostate Int., 9 (2021), pp. 176-180
- 10. Vayleux B, Rigaud J, Luycks F, et all. Female urinary incontinence and artificial sphincter: study of efficacy and risk factors for failure and complications. Eur Urol 2011;59:1048-1053.
- E. Chartier-Kastler, C. Vaessen, M. Rouprêt, S. Bassi, F. Cancrini, V. Phé Robot-assisted laparoscopic artificial urinary sphincter insertion in women with stress urinary incontinence: a pilot single-centre studyBJU Int., 126 (6) (2020 Dec 3), pp. 722-730
- 12. Outcomes of open artificial urinary sphincter in women with stress urinary incontinence:long -term follow up. Ther Adv Urol 2019, Vol.11:1-6.
- Phé V, Léon P, Granger B, et al. Stress urinary incontinence in female neurological patients: long-term functional outcomes after artificial urinary sphincter (AMS 800TM) implantation. Neurourol Urodyn 2017; 36: 764-769. - PubMed
- Barakat B., et al. A systematic review and meta-analysis of clinical and functional outcomes of artificial urinary sphincter implantation in women with stress urinary incontinence Reus C.R., et al. Arab J. Urol., 18 (2020), pp. 78-87
- Performance and safety of the artificial urinary sphincter (AMS 800) for non-neurogenic women with urinary incontinence secondary to intrinsic sphincter deficiency: A systematic review Eur. Urol. Focus, 6 (2020), pp. 327-338
- 16. Ferreira C., Brychaert P.-E., Menard J., Mandron E. Laparoscopic implantation of artificial urinary sphincter in women with intrinsic sphincter deficiency: Mid-term outcomes
- 17. Costa P., et al. Long-term results of artificial urinary sphincter for women with type III stress urinary incontinence Eur. Urol., 63 (2013), pp. 753-758
- 18. V.P., et al. Long-term functional outcomes after artificial urinary sphincter implantation in women with stress urinary incontinence BJU Int., 113 (2014)

Do women wish to talk about sex?

Joanna Ghigo⁽¹⁾

Consultant Obstetrician and Gynaecologist at Mater Dei Hospital Malta and Senior Lecturer at University of Malta⁽¹⁾

INTRODUCTION AND AIM OF THE STUDY

Sexual function is an important aspect of a woman's wellbeing that is often ignored during gynecological consultations (1). Sexual dysfunction causes significant distress and adversely affects a woman's Quality of Life (QOL).

Our study aims at establishing the prevalence of sexual dysfunction in women attending our gynecology clinics and explore women's preferences on the routine introduction of questions related to sexual function / dysfunction in general gynecological consultations.

MATERIALS AND METHODS

120 Caucasian women referred to gynaecology outpatients were identified and invited to complete an anonymous questionnaire. Written consent was sought.

Questions about frequency of sexual activity, dysparunia, problems with desire, arousal, orgasm and affect on QOL were included. Participants were asked whether they agreed to the gynaecologist asking questions related to sexual function, and record their answers in their hospital notes.

<u>RESULTS</u>

108 participants completed the questionnaires . Respondents were divided in 2 groups : a premenopausal group aged less than 50 years - 62 patients (57%) and a postmenopausal group aged over 50 years -46 (43%).

55 (89%) premenopausal patients reported regular sexual activity, compared to 32 (69%) postmenopausal patients. 26 (42%) premenopausal patients reported sexual dysfunction, with pain (65%) and problems with orgasm (33%) being most frequent whilst postmenopausal patients complained of vaginal dryness (85%), pain (70%) and difficulty in arousal (68%).

INTERPRETATION OF RESULTS

70 % of all respondents were favourable to the gynaecologist asking sexual function questions . A statistically significant difference between the two groups was noted.(p=0.033). Only 25 (23%) respondents agreed to records being kept.

Overall, women were more likely to discuss sexual dysfunction if they were affected. Being asked questions by the gynaecologist made women feel more comfortable disclosing sexual concerns as it 'normalizes the issue.' (2)

CONCLUSIONS

The gynaecological consulation presents a unique opportunity for a woman to speak to a doctor about her gynaecological and sexual concerns. Introducing sexuality in the gynaecological consulation offers a more holistic approach to patient care.

REFERENCES (max. 3)

1. Kottmel A, Ruether-Wolf KV, Bitzer J. Do gynecologists talk about sexual dysfunction with their patients? J Sex Med 2014;11:2048-2054.

2. Brandenburg U, Bitzer J. The challenge of talking about sex: the importance of patient-physician interaction. Maturitas 2009;63:124-127