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ABSTRACT BOOK

1 - IMPACT TO INTIMACY: THE CRYPTIC CONSEQUENCE OF PELVIC ORGAN PROLAPSE

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Introduction and Aim of Study

Pelvic organ prolapse (POP) associated sexual dysfunction is validated in research but seldom effectively explored within treatment protocol. Women find POP symptoms embarrassing to disclose to health care providers; practitioners seldom ask targeted sexual health questions. Vaginal tissue bulge, urinary incontinence, fecal incontinence, vaginal gap, and pain with intimacy individually and/or collectively cause considerable distress and restrict intimate relations. Altered female genital appearance and function are characteristic of POP and are deeply rooted in negative self-image, disabling sexuality. Patient voice indicates POP impact to intimacy is considerably more common and diverse than has been addressed in studies to date, and influences self-perception and intimate relations.

Materials and Methods

A 2-item survey was created and shared October 2019 to assess which POP symptoms made intercourse most frustrating. The survey was disseminated via Constant Contact email listserv, open social media channels, and a closed Facebook-based POP support forum. Twelve categories of POP symptom significance to intimacy were included.

Results

A total of 141 women responded. Respondent age was measured as 12 demographic categories varying between under 20 through over 80. Potential influence on intimacy was broken down into 12 categories. The 3 issues women found most frustrating concerning engaging in intercourse were 1) embarrassment of men seeing vaginal tissue bulge (52.5%); 2) fear of pain with intercourse (42.6%); and 3) loss of intimate sensation (41.8%).

Interpretations of Results

There is considerable discrepancy between patient and practitioner perception of the quality of life impacts of pelvic organ prolapse, and compelling need to include intimate and sexual health assessment during POP health screening and treatment.

Conclusions

Acknowledging and assessing sexual quality of life impact of POP will advance clinician understanding and caregiving. Addressing patient body image and sexuality is a significant component of POP evaluation and treatment.

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2 - Uterine Prolapse: Numerical Simulation of a Synthetic Mesh to Repair the Uterosacral Ligament

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INTRODUCTION AND AIM OF THE STUDY

In 2019, a study showed that 41-50% of women over the age of 40 are affected by pelvic organ prolapse (POP), which is a common urogenital condition [1]. Others studies showed that 11% of all women risk of undergoing POP surgery and the re-operation after surgery was about 30% [2,3]. Until, recently, surgeons relied on the use of meshes in reconstructive surgeries, but on April 16, 2019, the FDA has forbidden its use for transvaginal repair of anterior compartment POP, since its safety and effectiveness was not demonstrated in the context of patient population in a clinical trial. However, clinical trials are very expensive and can last for several years. Computer models and simulation can potentially be used in clinical trials as an alternative source of prior information.
The main aim of this study was to simulate an implant mesh to mimic the uterosacral ligament function based on pelvic computational model. For this purpose, was developed a computational model of a synthetic mesh, to repair the POP, based on existing specifications on the market.

MATERIALS AND METHODS

In this work was used a pelvic cavity computational model, including the pubic bone, the pelvic organs, the pelvic floor muscles (PFM), and other supporting structures. The mechanical behavior of the mesh implant was modeled, assuming a hyperelastic behavior, based on experimental curve that was obtained through uniaxial tensile tests performed in our laboratory. Computational simulation of Valsalva maneuver was performed for progressive increase in intra-abdominal pressure (IAP) up to 4 kPa.

RESULTS

The maximum magnitude of displacement of the uterus for asymptomatic model was approximately 29 mm. The rupture of the UL caused an increase of 28% (37 mm) in this displacement. The insertion of the synthetic mesh implant caused a reduction of 40% in the displacement (18 mm), when compared with asymptomatic model.

INTERPRETATION OF RESULTS

The obtained results show that the computational model was able to discriminate the effect of synthetic mesh implant to repair uterine prolapse when UL failure occurs. The mesh implant presents a higher stiffness than the UL.

CONCLUSIONS

The computational models can provide powerful insights on the mechanisms underlying and predict the effects of the mesh implants in the pelvic tissues, in a relatively inexpensive, personalized, fast and safe way, without resorting to random controlled trials and animal tests.

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3 - Vaginal hysterectomy under local anesthesia. Backup technique or a future routine practice?

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INTRODUCTION AND AIM OF THE STUDY

Vaginal hysterectomy (VH) for the surgical management of pelvic organ prolapse (POP) is usually performed under either general or regional anesthesia. Aim of this study is to evaluate the feasibility and safety of performing VH under local anesthesia.

MATERIALS AND METHODS

This was a case-control study of women with advanced POP who underwent a VH. The "standard care" group consisted of 20 patients who underwent VH under a combined spinal-epidural block, whereas the "local anesthesia" group consisted of 20 patients who underwent VH under local anesthesia and i.v. sedation.

RESULTS

The median pain intensity at rest and the number of women with moderate/severe pain was significantly lower in the "local anesthesia" group (table 1). The percentage of participants needing opioids was also statistically significant lower for the "local anesthesia" group (table 2). Furthermore, patients of the "local anesthesia" group had significantly shorter time to first mobilization, shorter duration of postoperative hospitalization and reported higher levels of satisfaction.

CONCLUSIONS

Local anesthesia for patients undergoing VH and PFR has been shown to be a viable alternative to regional anesthesia offering reduced postoperative pain, less opioid use, shorter duration of postoperative hospitalization and higher patient satisfaction.

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Table 1. Primary outcomes of the two groups at the early postoperative period.

	Local anesthesia (N=20; 50.0%)	Standard care (N=20; 50.0%)	Effect size[a]	P[b]
Pain at rest				
2h				
Median (IQR)	0 (0 - 1)	1.9 (0.7 - 4.8)	0.28	**0.001**
Moderate/ Severe	3 (15.0)	7 (35.0)	OR 0.33 (95% CI: 0.07 to 1.52)	0.154
4h				
Median (IQR)	0 (0 - 2)	4.1 (2.4 - 5.3)	0.36	**<0.001**
Moderate/ Severe	3 (15.0)	11 (61.1)	OR 0.11 (95% CI: 0.02 to 0.53)	**0.006**
8h				
Median (IQR)	1 (0 - 4)	2.7 (1.5 - 4.8)	0.15	**0.013**
Moderate/ Severe	6 (30.0)	8 (40.0)	OR 0.51 (95% CI: 0.17 to 2.38)	0.508
24h				
Median (IQR)	0 (0 - 1.5)	0.6 (0.4 - 1.3)	0.06	0.132
Moderate/ Severe	1 (5.0)	1 (5.0)	OR 1.00 (95% CI: 0.06 to 17.18)	1.000
Pain during cough				
2h				
Median (IQR)	0 (0 - 2)	3.1 (0.8 - 5.1)	0.24	**0.002**
Moderate/ Severe	4 (20.0)	8 (44.4)	OR 0.31 (95% CI: 0.07 to 1.32)	0.113
4h				
Median (IQR)	0 (0 - 2)	4.1 (2.7 - 5.7)	0.32	**<0.001**
Moderate/ Severe	4 (20.0)	12 (66.7)	OR 0.13 (95% CI: 0.03 to 0.54)	**0.006**
8h				
Median (IQR)	2 (0 - 5)	3.9 (1.3 - 5.5)	0.09	0.056
Moderate/ Severe	7 (35.0)	10 (52.6)	OR 0.49 (95% CI: 0.13 to 1.75)	0.270
24h				
Median (IQR)	1 (0 - 2)	1.2 (0.4 - 2.3)	0.02	0.422
Moderate/ Severe	2 (10.0)	1 (5.0)	OR 2.11 (95% CI: 0.18 to 25.35)	0.556

[a]Cohen's d

[b]Comparisons of continuous outcomes were performed using Mann–Whitney U-test.

Note. OR: Odds Ratio 95%CI: 95% Confidence Interval

Table 2. Secondary outcomes of the two groups at the early postoperative period.

	Local anaesthesia (N=20; 50.0%)	Standard care (N=20; 50.0%)	Effect size[a]	P[b]
Use of opioids	Tramadol 100mg	Morphine		
Total	7 (35.0)	19 (95.0)	OR 0.03 (95% CI: 0.01 to 0.26)	**0.002**
2h	0 (0.0)	16 (80.0)	*	**<0.001**
4h	1 (5.0)	16 (80.0)	OR 0.01 (95% CI: 0.00 to 0.13)	**<0.001**
8h	3 (15.0)	15 (75.0)	OR 0.06 (95% CI: 0.01 to 0.29)	**<0.001**
24h	3 (15.0)	10 (50.0)	OR 0.18 (95% CI: 0.04 to 0.80)	0.024
Sedation				
2h				
Median (IQR)	5 (3 - 5)	1 (0 - 4)	0.19	**0.006**
Moderate/ Severe	14 (70.0)	5 (25.0)	OR 7.00 (95% CI: 1.74 to 28.17)	**0.006**
4h				
Median (IQR)	3 (1 - 4.5)	2 (0.5 - 5.5)	0.00	0.967
Moderate/ Severe	9 (45.0)	9 (45.0)	OR 1.00 (95% CI: 0.29 to 3.48)	>0.999
8h				
Median (IQR)	2 (1 - 3)	3.5 (0.5 - 7)	0.07	0.095
Moderate/ Severe	1 (5.0)	10 (50.0)	OR 0.05 (95% CI: 0.01 to 0.47)	**0.009**
24h				
Median (IQR)	0.5 (0 - 1)	0 (0 - 4)	0.01	0.576
Moderate/ Severe	0 (0.0)	5 (25.0)	*	0.047
Nausea				
2h	1 (5.0)	4 (20.0)	OR 0.21 (95% CI: 0.02 to 2.08)	0.182
4h	1 (5.0)	3 (15.0)	OR 0.30 (95% CI: 0.03 to 3.15)	0.314
8h	0 (0.0)	6 (30.0)	*	**0.020**
24h	1 (5.0)	0 (0.0)	*	>0.999
Vomiting				
2h	0 (0.0)	2 (10.0)	*	0.487
4h	0 (0.0)	2 (10.0)	*	0.487
8h	0 (0.0)	3 (15.0)	*	0.231
24h	1 (5.0)	1 (5.0)	OR 1.00 (95% CI: 0.06 to 17.18)	>0.999

[a]Cohen's d [b]Comparisons of continuous outcomes were performed using Mann–Whitney U-test; *OR could not be calculated because of o distribution and comparison were made using Fisher's exact test

Note. OR: Odds Ratio 95%CI: 95% Confidence Interval

4 - The Greek Guideline on the management of 3rd – 4th degree obstetric anal sphincter injuries

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The Greek Guideline on the management of 3^O – 4^O obstetric anal sphincter injuries.

We present the Greek Guideline on the management of 3^O – 4^O obstetric anal sphincter injuries (OASIS), prepared by Hellenic Urogynaecology Society (HUGS) and soon to be issued by Hellenic Obstetrics & Gynaecology Society (EMGE).

The literature was reviewed by the board of HUGS and guidance was agreed upon based on the best available evidence.

OASIS injuries are to be classified according to the international standards as 1^o , 2^o ,3^o (3α, 3β, 3c) and 4^o . Perineal support at the time of delivery is recommended in order to prevent OASIS, but episiotomy is not routinely advised. Vigilance and thorough clinical examination at the time of delivery is advised for the diagnosis, as well as overlap or end to end technique and slowly absorbable sutures for the repair. Antibiotic prophylaxis, laxatives and long term follow up are useful for optimal management.

Even though OASIS are not always preventable and should not be regarded as malpractice, it is important to make prompt diagnosis and optimal repair, in order to avoid medicolegal implication

5 - Extending the limits of vaginal hysterectomy under local anesthesia and conscious sedation.

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Aim of the video: In this video we present the surgical management of a 58-year-old woman presenting with a large prolapsed myomatous uterus treated with vaginal hysterectomy (VH) and pelvic floor repair (PFR) (uterosacral ligament suspension and posterior colporraphy) under local anesthesia and conscious sedation.
Method: The patient underwent VH and PFR by using an infiltration of a local anesthetic solution of lidocaine, ropivacaine and adrenaline in combination with intravenous (iv) conscious sedation. Debulking techniques, such as intramyometrial coring, uterine bisection, myomectomy and wedge resection were used to facilitate VH.

Conclusion: This video demonstrates that performing a surgically challenging VH under local anesthesia is feasible. Vaginal uterine morcellation can be performed to debulk the enlarged uterus, so that hysterectomy can be accomplished under local anesthesia. The use of local anesthesia may safely be offered as an alternative to patients undergoing a complex vaginal hysterectomy and reconstructive surgery.

6 - Anchorless Vaginal Implant for The Treatment of Advance Pelvic Organ Prolapse

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INTRODUCTION AND AIM OF THE STUDY

The use of vaginal mesh in pelvic surgery has previously demonstrated anatomical advantage combined with surgical complications that have called its effectiveness into question. The aim of the study is to evaluate the safety and efficacy of an anchorless implant for repair of POP in women with risk factors for recurrence.

MATERIALS AND METHODS

Retrospective evaluation of the Self-retaining Support System (SRS) implant in women with a ≥2 degree vaginal anterior and apical prolapse with an increased risk of prolapse recurrence. Demographic and clinical data were collected, and women suspected of recurrence, based on telephone questionnaire, were re-examined.

RESULTS

Sixty women were evaluated. Four (6.6%) underwent reoperation due to prolapse recurrence of the posterior and vaginal apex. No intra-operative complications were documented. 4 (6.6%) had surgical field hematoma treated conservatively. No chronic pelvic pain or dyspareunia were documented. 6 (10%) women who reported bulging sensation in the telephone questionnaire were examined and found to have prolapse of the posterior compartment and not of the anterior or apical compartment treated by the SRS.

INTERPRETATION OF RESULTS

Short term data on the use of the SRS demonstrate that anchorless mesh technique may preserve the benefits of vaginal mesh while eliminating surgical complications. Our data is consistent with the SRS long-term data published earlier. The SRS is a safe and effective surgical alternative for the repair of anterior and apical vaginal prolapse in women with advanced pelvic organ prolapse and risk factors for relapse.

CONCLUSIONS

Use of the SRS demonstrated 93.3% success rate at a mean follow-up of 14 months postoperatively without intra-operative complications and mild post-op complications at follow-up.

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7 - Pubocervical "neo-fascia" for the treatment of advanced anterior vaginal wall prolapse.

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INTRODUCTION AND AIM OF THE STUDY

To describe a synthetic replacement of the Pubocervical fascia (PCF) as a method for anterior vaginal wall prolapse.

MATERIALS AND METHODS

Patients with advanced anterior wall prolapse were recruited prospectively for surgical treatment using an ultralight polypropylene implant. The polypropylene “neo fascia” is stretch between two biocompatible solid arms extending toward both ischial spines along the arcus tendinous fascia pelvis and a connecting part under the urethra. Patients were followed on a yearly basis using objective, Pelvic Organ Prolapse quantification system (POP-q), measurements and subjective, validated QoL-questionnaires (PFDI20, PISQ12). Anatomical successful outcome was defined as Ba/C < -1cm. Subjective successful outcome was defined as a negative response to the PFDI20 question number 3.

RESULTS

All regulatory requirements received. Research conducted in 4 hospitals by 6 urogynecologists. 70 women with symptomatic advanced prolapse were recruited. Mean age 63.1 (43-79) years, mean parity 4.6 (1-16) deliveries, mean BMI 26.3 (20.3-36.6) Kg/m^2. Preoperative POP-q were Ba=3.1 (-2 to 6) cm and C=0.4 (-8 to 6) cm. Mean operative time was 24.7min. No operative complications were documented. Patients were followed yearly with an average of 31.4 (12.5-41) months. Postoperative objective outcome was Ba= -2.8 ((-3) – (-1)) cm and C= -6.9 ((-10) - 1) cm. Complications included 1 case of erosion 32 weeks after surgery and 1 case of voiding dysfunction at 42 weeks post-surgery, both required partial resection of the implant. 2 cases of de-novo stress urinary incontinence were treated with mid urethral sling 1 year following surgery. No chronic pain was documented. PFDI20 scores were significantly improved from 40.3 to 17.8 in the urinary domain and from 41.4 to 12.3 in the prolapse domain. 32 patients answered the PISQ12 revealing no dyspareunia or other sexual dysfunction.

INTERPRETATION OF RESULTS

This surgical technique revealed 97.2% subjective and 93% anatomical success rate at average follow up of 31.4 months.

CONCLUSIONS

Using a synthetic “neo- PCF” can provide a safe and effective surgical solution for advanced anterior wall prolapse.

8 – TOTAL NATIVE TISSUE LAPAROSCOPIC APPROACH FOR THE TREATMENT OF POP AND SUI

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INTRODUCTION AND AIM OF THE STUDY

Surgical treatment of pelvic organ prolapse (POP) and stress urinary incontinence (SUI) may be performed with or without the use of synthetic mesh. However, the recent ban of transvaginal meshes for the treatment of POP by the FDA and the ban of use of midurethral slings in the UK may direct the interest of surgeons to evaluate laparoscopic native tissue procedures.

MATERIALS AND METHODS

A 69 years old woman with postmenopausal bleeding was diagnosed with endometrial hyperplasia with atypia on endometrial biopsy. The patient also complained of symptoms of POP and SUI. On examination she was found to have a grade 2 prolapse of the uterus, grade 3 cystocele, grade 2 enterocele, grade 1 rectocele and stress urinary incontinence. She had a history of rheumatoid arthritis for which she was on medications. Following counselling, the patient underwent a total native tissue laparoscopic approach for the treatment of POP and SUI.

RESULTS

We present the video of a total native tissue laparoscopic approach for the treatment of POP and SUI. A total laparoscopic hysterectomy and bilateral oophorectomy was performed at the same time combined with laparoscopic anterior colporrhaphy, Burch colposuspension, suspension of the vaginal cuff to the uterosacral ligaments and Moschowitch procedure.

INTERPRETATION OF RESULTS

This is an initial experience of total laparoscopic treatment for treatment of POP of all 3 levels of pelvic support and the treatment of SUI using native tissue only.

CONCLUSIONS

A total laparoscopic approach using native only tissue is feasible. However, surgeons will have to undergo a learning curve for such procedures and patients should be counselled about the lack of long term efficacy.

9 - Efficacy and safety of Onabotulinumtoxin A injection in male patients with detrusor overactivity after stress urinary incontinence surgery

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Introduction and objecitve

The use of Onabotulinumtoxin A (BoNT-A) injection in male patients with detrusor overactiviy (DO) after stress urinary incontinence (SUI) surgery has been scarcely described. Our aim was to assess results of this treatment in this specific population.

Materials and methods

Retrospective analysis of men with previous SUI surgery who had been treated with a first injection of 100 U BoNT-A because of DO since 2010 in our department. Treatment response was assessed with a treatment benefit scale (TBS): 1, greatly improved; 2, improved; 3, not changed; 4, worsened after treatment (TBS 1 or 2: treatment response). Complications were classified according to the Clavien-Dindo (CD) classification. Treatment continuation was considered present if, at the last visit, patients had received a BoNT-A injection within the preceding 12 months. Pre- and post-treatment urodynamic variables were compared.

Results

18 patients were included, median age 71.1 (59.1–83.5) years. 12 (66.7%) patients reported response to treatment. 2 (11.1%) complications were detected: urinary retention requiring clean intermittent catheterization (CIC) (CD2). No complications related to the previous SUI surgery were detected. 15 (83.3%) patients had a follow-up >12 months [median follow-up 57 (15–89) months] and all of them had discontinued treatment at the end of follow-up. A significant improvement in the presence of DO and in bladder compliance was observed in the urodynamic study.

Conclusion

Although most men with DO after SUI surgery respond to intradetrusor BoNT-A injection, all of them discontinue treatment due to personal reasons. This is a safe procedure, with urinary retention requiring CIC being the most frequent complication.

10 - IS ONABOTULINUM TOXIN-A COMBINED INJECTION IN THE BOWEL PATCH AND THE BLADDER REMNANT A SAFE ALTERNATIVE TO BLADDER RE-AUGMENTATION?

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OBJECTIVE: To assess both the safety and efficacy, in terms of symptomatic improvement, of botulinum toxin injections distributed in the bowel patch and the bladder remnant of failed augmented bladders.

MATERIALS AND METHODS: A retrospective study was performed on patients with augmented bladders who had presented with clinical and/or urodynamic failure and had received an onabotulinum toxin-A injection at both the bowel and the bladder level due to refractoriness to oral treatment. The primary variable tested was safety, which was assessed by analysing the adverse effects according to the Clavien-Dindo classification. Subjective improvement was assessed by means of the Treatment Benefit Scale (TBS) as a secondary variable.

RESULTS: Eight patients who underwent a total of 23 procedures were analysed. The mean age at first injection was 23 years. The mean interval between bladder augmentation and first BTX-A injection was 65.11 months. The mean interval between BTX-A injections was 11.6 months. No adverse effects due to systemic absorption were recorded. The only postoperative complication was an afebrile urinary infection (Clavien-Dindo 2) in 2 out of 23 procedures (8.7%). Eighty-six percent (19/22) of the procedures yielded a symptomatic benefit (TBS 1 and 2).

CONCLUSION: Injection of onabotulinum toxin-A in both the bowel patch and the bladder remnant appears to be a safe and efficient technique for the symptomatic treatment of patients with bladder augmentation who have shown clinical and/or urodynamic failure in response to a conservative treatment. This procedure allows bladder re-augmentation to be delayed or even avoided.

11 - Safety and efficacy of local anesthesia for pelvic floor reconstructive surgery: A systematic review and meta-analysis

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INTRODUCTION AND AIM OF THE STUDY

Local anesthesia (LA) has been proposed as an effective alternative anesthetic modality for the repair of pelvic floor disorders. We aim to review the currently available literature on urogynecological procedures performed under local anaesthesia.

MATERIALS AND METHODS

Four electronic databases were systematically seached for articles evaluating pelvic floor reconstructive surgery under LA with or without sedation.

RESULTS

Nineteen studies (14 non-comparative and 5 comparative), including 1626 patients who had pelvic reconstructive procedures under LA were recruited. Meta-analysis revealed significantly lower mean pain scores in LA group compared to the general-regional anesthesia one (GA/RA) at both 4-6 hours and 8-18 hours postoperatively. Intra-and postoperative morphine use did not differ among patients who received LA and GA during prolapse surgery whereas nausea rates were significantly reduced in LA group compared to RA group 8 hours postoperatively.

INTERPRETATION OF RESULTS

LA with or without sedation represents a safe and efficient alternative anaesthetic technique for urogynecological procedures with improved pain scores in up to 18 hours postoperatively particularly in patients who underwent surgery for SUI.

CONCLUSIONS

LA for pelvic floor surgery is feasible and could be considered if avoiding the systemic effects of general anesthesia and possible complications of regional anesthesia is desired.

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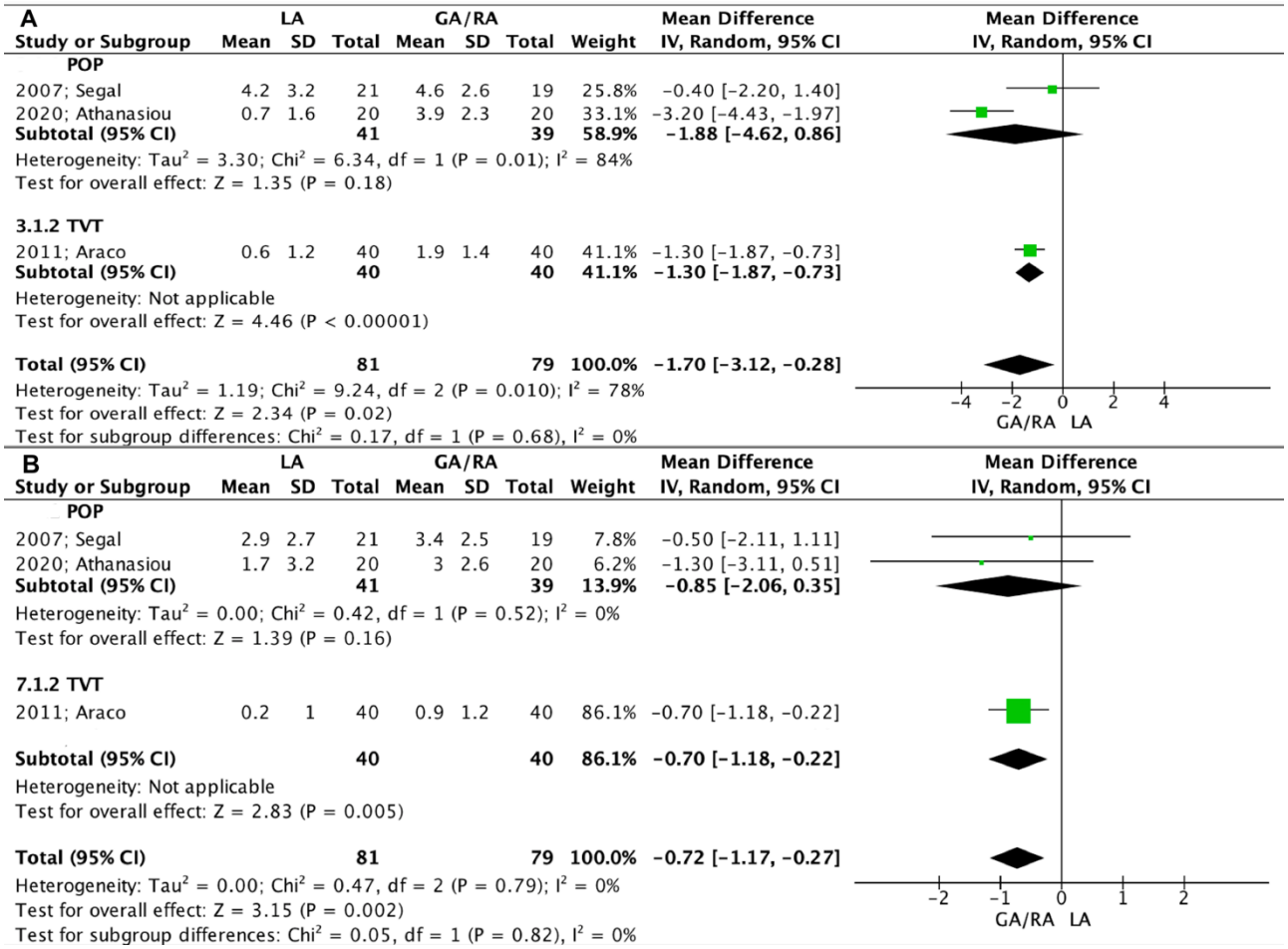
Figure: Forest plot depicting mean scores in LA group compared to GA/RA at **a)** 4 to 6 hours and **b)** 8 to 18 hours postoperatively (postoperative pain scores were assessed on a scale from 0 to 10 with score 10 considered the worst pain)



12 - An overview on the use of platelet rich plasma in urogynecological and and pelvic floor disorders.

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INTRODUCTION AND AIM OF THE STUDY

The regenerative role of platelet-rich-plasma (PRP) has been investigated in the treatment of pelvic floor disorders (PFDs). We aim to review the current evidence on the use of PRP in urogynecological disorders including vaginal atrophy, pelvic organ prolapse, urinary incontinence (UI), vaginal fistulas and vaginal mesh exposure.

MATERIALS AND METHODS

A meticulous search of 3 electronic databases was performed. All appropriate prosepctive and retropsective studies, case reports and case series were critically appraised.

RESULTS

For the management of vaginal atrophy PRP could be a feasible alternative modality associated with favorable outcomes in vaginal atrophy parameters and patients' satisfaction, particularly in cases of contraindications for hormone therapy. In patients with pelvic organ prolapse, an increase in collagen concentration after PRP application was observed while an improvement in UI symptoms was noted with the use of PRP. A considerable proportion of vesicovaginal fistulas were treated after PRP-based injections.

INTERPRETATION OF RESULTS

The currently available data is still limited of the use of PRP for PFDs.

CONCLUSIONS

PRP appears to be a promising, cost-effective and feasible alternative therapeutic modality for the management of various PFDs. Future well-designed trials are needed to confirm the aforementioned outcomes.

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Table 1. Characteristics of the included studies						
Year; Author	***Type of study***	***Type of gynecological disorder/procedure***	***Assessed parameters***	***PRP preparation technique***	***Dose of PRP injection***	***Injected areas***
2018; Hersant	Phase II pilot PS	Vulvovaginal laxity/ PRP-HA injections	VHI score>15; vaginal pH; efficacy of treatment; sexual quality; pain (VAS score)	RegenKit-BCT-HA (a mixture of PRP and HA (40 mg [2% w/v] of non-crosslinked HA per tube, 1,550 KDa) Centrifugation 1500g for 5min	4 mL of PRP-HA (2ml PRP mixed with 2 mL HA) Injections every 5mm with 27G caliber needle and a 1-mL syringe	Into the vestibule and the 1st 3cm of the posterior vagina and 2cm posterior wall of the introitus using a speculum or by laterally opening the vaginal walls with the fingers
2017; Kim	CR	Vaginal atrophy and lichen sclerosus/ Filling with autologous fat and PRP	Postoperative photographs	Double spin centrifugation with SmartPrep APC-30 4cc of PRP derived from 30cc of autologous PRP	40cc autologous fat mixed with PRP (1cc syringes)	Subcutaneous layer of the labia majora aseptically via 4 ports
2016; Aguilar	CR	Vaginal laxity-sexual dysfunction/ Vaginoplasty+ PRP with HA	Stabbatsberg sexual self rating scale	RegenKit BCT- 4 mL of PRP-HA Centrifugation 1500g for 5min manual homogenization PRP and HA Harvesting fat (Coleman's technique) centrifigued at 1500g for 1min	4 mL of PRP-HA (2ml PRP mixed with 2 mL HA)	16ml fat cells in the posterior vaginal wall & 10ml PRP-HA epusiotomy scar - vestibular fossa and in the labius minus and majus
PS: Prospective, CS: case report, PRP: Platelet rich plasma, HA: Hyaluronic acid, N/A: Not available, VHI: Vaginal health index, VAS: Visual analog scale						

Table 2. Characteristics of the included studies for the use of PRP in POP						
Year; Author	***Type of study***	***Type of gynecologic disorder/treatment***	***Assessed parameters***	***PRP preparation***	***Dose of PRP***	***Type of application***
2015; Medel	In vitro	POP	Attachement of POP human vaginal fibroblast to 2 meshes	Regen ACR-Ckit 8ml whole blood centrifuge for 5min at 1500g; collection of 4ml supernatant	Coat in 200µL PRP	Coating of 5x5mm squares of absorbable polyglactin mesh and nonabsorbable polypropylene mesh into 200µL PRP
2012; Gorlero	PS	Recurrent symptomatic POP (≥II stage) / anterior posterior or apical repair + PRF	ICS POP grading system; P-QoL questionnaire results pre- and prostoperatively; POP symptoms; QOL; Vancouver scar scale for pigmentation, pliability, height and vascularity; anatomical successful of the prolapse repair	PRF-Vivostat system - polymerization of fibrin activated by simple pH change	120ml blood 6ml autologous sealant (1ml of PRF covers 3-4cm)	Constant spraying direct to the surgical site for 7min PRF polymerized into a white gel
2009; Einarsson	Pilot	Anterior POP/standard anterior repair + APG: (Thrombin-rich serum and platelet-rich plasma) punch biopsy taken from the anterior wall at the beginning of the surgery	RNA of specimen pre- and 3months PO (6-mm punch biopsy); POP-Q (pre-, 3-, 18-and 23-months PO; objective and subjective recurrence; subjective patients satisfaction (from 1 to 5))	52ml of whole blood in 8ml of anticoagulant dextrose Centrifuge PRP was drawn up into a syringe with added glass fibers Once a clot had formed, the thrombin-rich serum was expressed out through a filter into a new syringe	N/A	After plication of the pubocervical fascia and before closure of the vaginal epithelium; Closure of vaginal epithelium with a running absorbable suture
PS: prospective; PRF: platelet rich fibrin; ICS: International continence society; POP: Pelvic organ prolapse; IP: intraoperative; PO: postoperative; QOL: quality of life; APG: Autologous platelet gel						

Table 3. Characteristics of the included studies for the use of PRP in vaginal fistulas					
Year; Author	***Type of study***	***Type of gynecologic disorder/treatment***	***Assessed parameters***	***PRP preparation***	***Type of application***
2019; Streit-Cieckiewicz	PS-CS	Recurrent VVF/ PRP injection and sugery after 6-8 weeks	Assessment of patient' status by releasing 150ml methylene blue dye into bladder before discharge	150-180ml whole blood collected into sodium citrate tubes-centrifugation (Arthrex Angel System kit) 4-6ml of PRP	4-6ml PRP Transvaginal injection in 15 patients and via cystoscopy in 1 patient in 4-5 points around the edges of the fistula
2013; Shirvan	CS	VVF/ PRP-PRFP arpund and into the VVF tract	Subjective symptoms; ICIQ-UI and ICIQ-UI at baseline and after 10 days and 1, 3 and 6 months after catheter removal	60ml whole blood in 9ml citrate phosphate dextrose buffer; centrifugation 2000g/2min (1^{st}) and 4000g/8min (2^{nd})-4ml PRP. 2ml of PRP +2ml fibrinogen concentrate (PRFP). 4ml PRFP + 1ml thrombin-calcium solution to form rich fibrin glue	2ml PRP around the fistula, 5ml mixture of PRFP with thrombin-calcium injected into the tract within 5min to form a clot
PS: prospective; CS: Case series; VVF: vesicovaginal fistula; PRP: platelet rich plasma; ICIQ-UI: international consultation on incontinence questionnaire-urinary incontinence; ICIQ-QOL: : international consultation on incontinence questionnaire-quality of life					

13 - Mobility and morphology of the urethra in women with urodynamic stress incontinence

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Mobility and morphology of the urethra in women with urodynamic stress incontinence

INTRODUCTION AND AIM OF THE STUDY

In the present study we aimed to evaluate the mobility and compression ratio of the urethra by computing the Hausdorff distances of the urethra between rest and Valsalva in continent volunteers and women with SUI.

MATERIALS AND METHODS

We prospectively evaluated women with USI and healthy continent volunteers who underwent a 2D translabial ultrasound. 3dSlicer software allowed to compare the images at rest and at Valsalva using the symphysis pubis as a fixed point of reference. The mobility of the entire urethra and the urethra's segments were compared at rest and Valsalva by computing the Hausdorff distances (photo-1).

RESULTS

Sample characteristics are presented in table 1. Increased values of mobility of the midurethra were associated with USI. Furthermore, increased miduretha compression ratio was associated with lower probability for USI (table 2).

ROC analysis based on the Hausdorff distances for mid-urethra (Figure 1) showed that the optimal cut-off for the discrimination of USI was 8.69mm, while for mid-urethral compression (Figure 2) the optimal cut-off was equal to 1.2 (sensitivity 75.0% and specificity 75.0%).

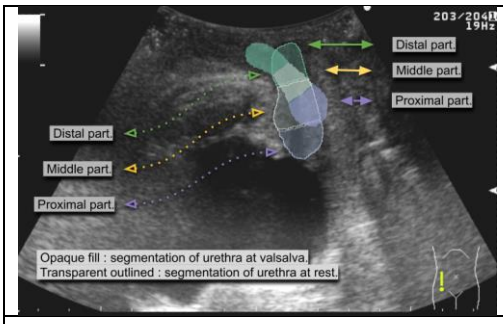
CONCLUSIONS

Mobility of the urethra as defined by Hausdorff distances and urethral compression ratio have been found to be correlated with USI.

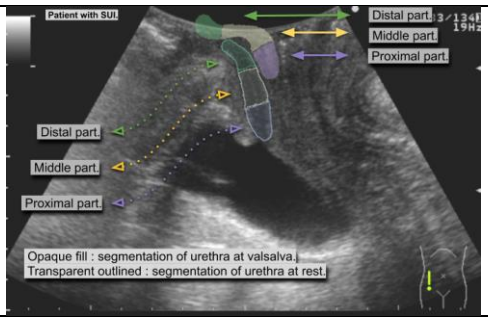
Table 1. Sample characteristics

	N (%)
Age (years), mean (SD)	46.4 (13.0)
Urodynamic diagnosis	
• Normal	10 (20)
• USI	40 (80)
Mid-urethra Hausdorff distance, mean (SD)	12.18 (6.41)
Proximal urethra Hausdorff distance, mean (SD)	15.03 (6.86)
Mid-urethra compression ratio, mean (SD)	1.2 (0.4)
Total urethra compression ratio, mean (SD)	1.2 (0.3)

Photo 1. Calculation of Hausdorff distances of the urethral segments (proximal, mid, distant)



a. Continent subject



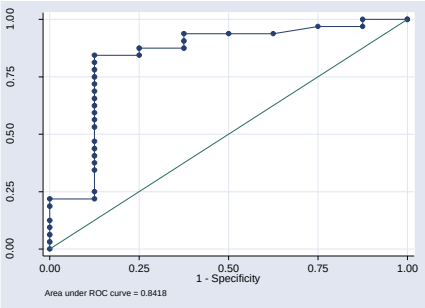
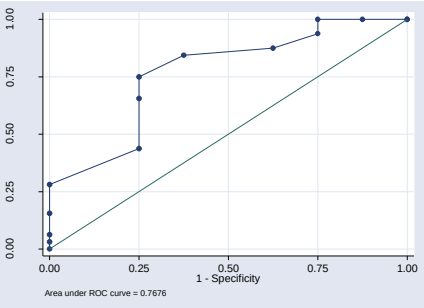
b. Subject with USI

Table 2. Logistic regression analysis of continent vs. USI (any degree of severity)

	OR (95% CI)	P
Mid urethra mobility	1.44(1.10-1.89)	**0.008**
Proximal urethra mobility	1.29(1.07-1.56)	**0.007**
Mid-urethral compression ratio	0.05 (0.01-0.62)	**0.019**
Total urethra compression ratio	0.10 (0.01-1.61)	0.104

Table 3. Ordinal logistic regression analysis of urethral mobility and USI severity

	OR (95% CI)	P
Mid Urethra mobility	1.19(1.04-1.36)	**0.009**
Proximal urethra mobility	1.13(1.02-1.25)	**0.014**
Mid urethra compression ratio	0.12 (0.02-0.72)	**0.021**
Total Urethral compression ratio	0.31 (0.03-2.97)	0.312

Figure 1. ROC analysis for the discrimination of diagnosis of USI at the mid-urethra based on the Hausdorff distances	**Figure 2.** ROC analysis for the discrimination of patients with USI based on the compression ratio of the mid-urethra
	

14 - Incontinence and prevention: vision in Slovenia

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The main vision of Section of Enterostomal therapists in Slovenia is to include enterostomal therapist in health system as an independent specialist. They work interdisciplinary, educational, researchouble and health educational on primary, secondary and tertiary level. He/she will be able to work as by himself /herself on the prevention of incontinence and that is the second vision.

We plan to establish an outpatient clinics with enterostomal therapists for incontinence, on primary level. That includes, for example, all the education of patients, recognition of incontinence, assessment of the situation,talking and teaching about quality of life and habits, teaching patients about the pelvic floor muscles training and he/she will be cooperating with different specialists and/or physioterapists.

At this point of view, before establishing all this outpatients clinics, we should already include enterostomal therapists in gynecology outpatient clinics, wich are usually first door to cope with incontinence on primary level.

Key words: enterostomal therapist, incontinence, primary level, prevention

15 - THE ROLE OF PLATELET RICH PLASMA (PRP) FOR TREATMENT OF STRESS URINARY INCONTINENCE

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Introduction and aim of the study

To evaluate the efficacy and safety of PRP for the treatment of stress urinary incontinence (SUI).

Materials and methods

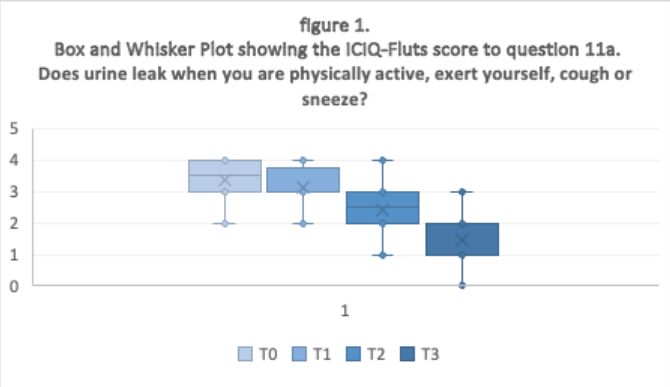
Prospective evaluation of women with SUI. Autologous blood samples of 10cc were collected to create approximately 5.5 ml of PRP (RegenPRP^{TM} kit). PRP was activated with 1:10 CaCl 10%. All participants underwent 2 PRP injections into the lower one-third of the anterior vaginal wall and the periurethral area at 4-6 week intervals. At baseline (T0) participants underwent urodynamic studies, a 1-hr pad test and completed the ICIQ-FLUTS and KHQ. During follow up visits (1,3, and 6 months) patients underwent the 1hr-pad test and completed KHQ, ICIQ-FLUTS and PGI-I. Primary outcome was to evaluate post-treatment SUI. Secondary outcomes included the scores of questionnaires and the 1hr-pad test.

Results

20 women were included with mean age 56.5 years and mean BMI 27.1 kg/m^2. The mean score of 11a question of ICIQ-FLUTS was 3.35 before treatment and decreased significantly to 1.45 6 months after treatment (fig. 1). Scores of questionnaires and 1hr-pad test are presented in tables 1,2 and 3. 80 % of participants reported to be at least 'improved' (fig. 2).

Conclusions

PRP may offer a minimally invasive alternative treatment for improving SUI symptoms.



ICIQ-FLUTS	T0 Baseline		T1 1-month		T2 3 months		T3 6 months		P T0-T1	P T0-T2	P T0-T3	P T1-T2	P T1-T3	P T2-T3
	Mean	SD	Mean	SD	Mean	SD	Mean	SD						
Filling score	5,2	3,6	4,4	3,4	4,5	3,2	4,0	3,1	0,438	0,215	**0,035**	1,000	**0,035**	0,241
Voiding score	2,3	3,0	1,9	2,8	2,1	2,8	1,4	1,8	1,000	1,000	0,241	1,000	0,760	0,796
Incontinence score	10,5	3,7	9,0	3,8	8,1	3,8	6,6	3,9	0,171	**0,005**	**0,002**	**0,001**	**<0,001**	**0,009**
TOTAL score	18,0	9,5	15,3	9,2	14,6	9,2	12,0	8,2	0,388	0,058	**0,006**	**<0,001**	**<0,001**	**0,007**

TABLE 1. ICIQ-FLUTS: International consultation on incontinence questionnaire female lower urinary tract symptoms module
Note. P-values are from Repeated Measures ANOVA after Bonferroni correction

KHQ	T0		T1		T2		T3		P T0-T1	P T0-T2	P T0-T3	P T1-T2	P T1-T3	P T2-T3
	Mean	SD	Mean	SD	Mean	SD	Mean	SD						
GHP	35,3	26,6	25,0	23,4	23,3	17,6	23,2	18,3	1,000	0,623	0,718	1,000	1,000	1,000
II	71,3	27,1	72,7	21,2	69,0	23,5	57,2	20,6	1,000	1,000	0,775	1,000	**0,049**	0,112
RL	61,7	32,7	60,8	30,0	56,7	33,2	57,2	29,1	1,000	1,000	1,000	1,000	1,000	1,000
PL	68,6	31,1	63,7	28,9	56,8	29,4	57,2	29,1	1,000	0,588	0,870	0,793	1,000	1,000
SL	44,8	34,3	36,6	31,6	37,4	31,4	37,3	29,6	0,657	0,283	0,379	0,989	1,000	1,000
PR	25,2	32,2	28,2	37,9	27,6	38,5	27,1	36,0	1,000	1,000	1,000	1,000	0,971	0,989
E	52,2	32,5	49,6	32,6	51,1	33,9	44,4	33,6	1,000	1,000	1,000	1,000	0,576	0,360
SE	31,4	30,0	29,4	27,3	29,9	27,6	29,8	25,5	0,808	0,808	1,000	1,000	1,000	1,000
SM	67,9	21,8	62,0	25,1	62,7	27,2	54,9	23,1	0,921	1,000	0,120	0,997	0,543	0,336

TABLE 2. Health-Related Quality of Life Assessement Using the KHQ Domain Values
Note. P-values are from Repeated Measures ANOVA after Bonferroni correction

	T0		T2		T3		P T0-T2	P T2-T3	P T0-T3
	Mean	SD	Mean	SD	Mean	SD			
PAD TEST	14,5	7,9	12,7	7,6	8,3	8,7	0,165	<0,001	<0,001

TABLE 3. Distribution of the results of the 1-hour pad test at baseline (T0), at the 3-month follow up (T2) and at the 6-month follow up

Note. P-values are from Repeated Measures ANOVA after Bonferroni correction

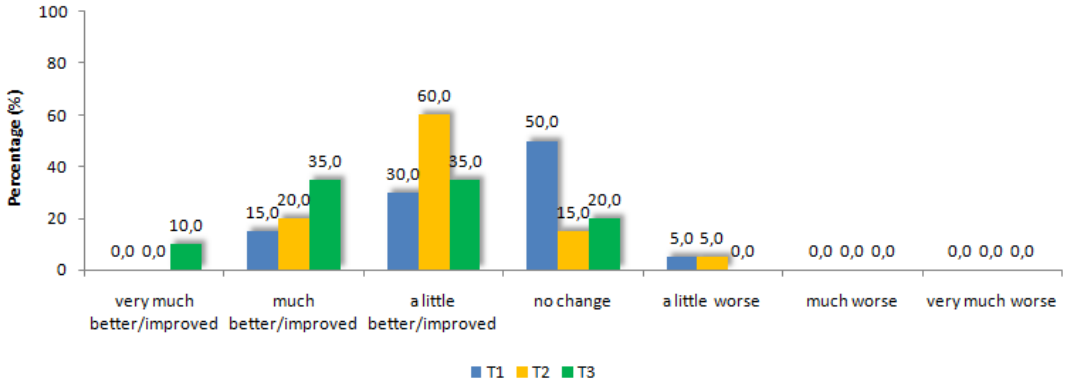


FIGURE 2. Distribution of responses on the PGI-I rating scale

Note. P-values are from Repeated Measures ANOVA after Bonferroni correction

16 - Revisiting Rehabilitation programs for Pelvic Floor dysfunction during COVID-19 pandemic.

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INTRODUCTION: Pelvic floor (PF) dysfunction and urinary incontinence (UI) are common problems in women and may decrease quality of life. The special conditions of COVID-19 pandemic have reduced the attendance of women, seeking a solution and prevented the complete implementation of the previously used protocols of conservative treatment. Aim of this study is to present the COVID-19 adapted pelvic floor muscle training rehabilitation program (A-PFMT-RP) in a PRM department of general hospital and consumers' satisfaction.

METHODS: The conventional PFMT-RP, before pandemic is presented in Table 1. During the last 6 months, 10 women (mean age: 54y) were referred for PF rehabilitation by the Urogynecology Unit. Type of incontinence and/or POP are presented in Table 2. Following their clinical assessment, they were advised to enter the A-PFMT-RP (Table 3). Women's satisfaction was assessed with the 5 scale.

RESULTS: 7 women (70%) agreed to participate in the A-PFMT-RP. All of them reported improvement (follow-up, voiding diaries, validated questionnaires). Concerning the A-PFMT-RP women were in 57% satisfied and very satisfied. The 30% who didn't participate, preferred private practice instead of general hospital. Difficulties of program implementation: some patients (mostly the elderly) didn't know how use teleconference platform, internet problems. To overcome these, phone-calls were also used.

CONCLUSION: Despite the limitations in our study (small number of patients), results seem satisfying. COVID-19 pandemic made us revisit the PF rehabilitation program, incorporate tele-rehabilitation sessions and probably keep some advantages of this revised program after pandemic.

Table 1. Timetable of the conventional program

MONTH	WEEKS			
1st	1st 2 sessions	2nd 2 sessions	3rd 1 session	4th 1 session
2nd	5th -	6th 1 session	7th -	8th 1 session
3rd	9th -	10th -	11th -	12th 1 session
4th	13th -	14th -	15th -	16th 1 session

Table 2. Type of incontinence

TYPE OF INCONTINENCE/POP	N (%)
Stress incontinence	3 (42.9)
Urge incontinence	(-)
mixed	3 (42.9)
POP*	4 (57.1)

*some cases with POP , presented incontinence too, 60% of them underwent urodynamics

Table 3. Timetable of the adapted program

MONTH	WEEKS			
1st	1st 1 session in person +1 tele-rehabilitation)	2nd 1 session in person +1 tele-rehabilitation)	3rd 1 tele-rehabilitation	4th 1 session in person
2nd	5th 1 tele-rehabilitation	6th -	7th 1 tele-rehabilitation	8th 1 session in person
3rd	9th -	10th -	11th -	12th 1 session in person
4th	13th -	14th -	15th -	16th 1 tele-rehabilitation

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17 - Management of coital incontinence in women with multiple sclerosis

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INTRODUCTION AND AIM OF THE STUDY

Coital incontinence (CI) is defined as incontinence during vaginal intercourse and may be present in women with Multiple Sclerosis (MS). In our study, we examined the effect of pelvic floor muscle training (PFMT) on the improvement of sexual life in women with MS and CI.

MATERIALS AND METHODS

This is an observational study, including women with MS and CI. Patients have been evaluated at the baseline with bladder diary (BD) and questionnaires; International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form (ICIQ-UI SF), King's Health Questionnaire (KHQ) and Female Sexual Function Index (FSFI). Afterwards, they underwent PFMT. They have been re-evaluated after 9 months and data has been collected and analyzed.

RESULTS

18 women (mean age: 31.5y.o.) completed the study. At baseline, all patients documented CI on BD, while the mean ICIQ-UI SF score was 15.5. Regarding KHQ, all women referred that CI deteriorated sexual life. In 1 (5.6%) of them CI had a low impact, in 8 (44.4%) a moderate and in 9 (50%) of them high impact in sexual activity. The mean FSFI score was 18 and for the desire domain, the mean sub-score was 1.8. After 9 months, 9 (50%) women reported CI on their BD and the mean ICIQ-UI SF was 7, significantly changed from baseline (p= 0.02). In KHQ, 9 women (50%) referred no impact of CI in sexual life, 8 (44.4%) a medium and only 1 (5.6%) referred a high impact. The mean FSFI was 23.4, not significantly changed (p= 0.08), while there is a significant improvement in desire sub-score, counted at 4.2 (p= 0.01).

INTERPRETATION OF RESULTS

PFMT could be beneficial even in sexual life for women with MS.

CONCLUSIONS

Management of CI with PFMT seems to have a positive impact in sexually active women with MS. The elimination of CI is followed by an improvement in sexual activity.

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Male and Female Urinary Incontinence

Female Sexual Dysfunction

Urodynamics

18 - Video urodynamic pattern in patients affected with spine lesion versus other neurological diseases affecting micturition.

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INTRODUCTION AND AIM OF THE STUDY

In neuro-urological patients, spine lesions have a higher risk of developing upper urinary tract damage as current medical literature reports.

Vesico-ureteral reflux is perhaps the most relevant cause of upper urinary tract damage.

It is common opinion that vesico-ureteral reflux is to be suspected in spine lesions. Less attention in devoted to this dysfunction in other diseases affecting the central nervous system.

The aim of the study was to evaluate video urodynamic pattern in patients affected with spine lesion versus other neurological diseases affecting micturition.

MATERIALS AND METHODS

Neuro-urological patients who underwent video urodynamics to rule out the presence of vesico-ureteral reflux in our centre from 2015 to 2019 were reviewed.

We considered age, sex, neurological disease, time from onset of neurological disease, and Video urodynamic parameters.

Statistical differences between groups were evaluated (t test 2 tails or chi square, as appropriate). Simstat v 2.5.3 was used as statistical package.

We considered 113 patients, 77 males and 36 females. Their age was between 13 and 85, with an average of 5.2, SD 1.8.

Median duration of neurological disease was 6 years .

Neurological diseases were: traumatic SCI (n=47), Multiple Sclerosis (n=19), Parkinson Disease (n=5), Non-traumatic Spine Lesions (n=33). 9 patients were affected with stroke sequelae.

So in 80 patients (61%) there was a spine lesion (group 1). 33 were affected with Multiple Sclerosis, Parkinson, Stroke (group 2).

RESULTS

There was no significant difference in mean age between the two groups. Maximum detrusor pressure was higher in group 1: 48 vs 37 cm H2O (NS), as bladder filling at first detrusor contraction was (267ml vs 176, P=.004).

Detrusor overactivity was more frequent in group 1 (82.5% vs 57.6%. P<.01).

There was no significant difference between the groups neither in dyssinergia (84% in group 1, 36% in group 2), nor in vesico-ureteral reflux patients: 18,2% in group 1, 17.5%in group 2.

We found also 18 bladder diverticula, no statistical significance between groups.

INTERPRETATION OF RESULTS

There was a significant difference in detrusor overactivity, more frequent in spine lesion group.

There was no significant difference in dyssinergia, vesico-ureteral reflux, bladder diverticula.

Spine lesions are considered a paradigm for detrusor overactivity, vesico-ureteral reflux and bladder diverticula. In our data there is not so a clear difference between spine lesion and the other neurological disease patients.

CONCLUSIONS

It is common opinion that vesico-ureteral reflux is to be suspected in spine lesions.
Our data suggest that so dangerous a dysfunction is not restricted to spine lesions. It should be mandatory to evaluate urinary pattern also in other important neurological diseases.

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19 - Pelvic floor muscle training for women with non-neurogenic voiding dysfunction

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Pelvic floor muscle training for women with non-neurogenic voiding dysfunction

INTRODUCTION AND AIM OF THE STUDY

Voiding dysfunction in women without neurological history is a situation under current investigation. In this study, we examined the efficacy of pelvic floor muscle training (PFMT) in women with non-neurogenic lower urinary tract dysfunction (LUTD).

MATERIALS AND METHODS

This is an observational study including non-neurological women with LUTD. All patients underwent cystoscopy, cystogram, uroflow, post void residual (PVR) estimation and urodynamic study (UDS) at the baseline. Patients with urethral stricture and obstructive bladder neck have been excluded. Afterwards, women underwent PFMT for 6 months and then they were re-evaluated. Clinical follow-up lasted for one year.

RESULTS

48 women (mean age: 67.5y.o.) completed the study. At the baseline, 20 (41.67%) reported a history of recurrent UTIs and 12 (25%) at least one episode of urine retention. Moreover, 10 (20.83%) patients with a PVR larger than 100ml were advised to be self-catheterized. The mean maximum flow rate (Qmax) was 6.5ml/sec, the mean total flow time was 21.5sec and the mean PVR was 120ml. The UDS revealed 38 (79.17%) women were obstructive, 16 (42.1%) with mild, 14 (36.84%) with moderate and 8 (21.05%) with severe obstruction. After PFMT, the mean Qmax was 8.25ml/sec and the mean voiding time was 18.5sec, not significantly changed (p= 0.16 and p= 0.27 respectively). The mean PVR was 60ml, significantly reduced (p= 0.02). Additionally, only 2 (4.17%) patients needed self-catheterization. Regarding UDS re-evaluation, 33 (68.75%) women remained obstructive, 22 (66.67%) of them has mild, 8 (24.24%) moderate and 3 (9.09%) severe obstruction. After one year of follow-up, only 5 (10.42%) patients reported UTIs and there were no cases of retention.

INTERPRETATION OF RESULTS

PFMT could be a solution for clinical improvement in women with clinically significant LUTD.

CONCLUSIONS

A six-month course of PFMT could be beneficial for the clinical status in women with non-neurogenic LUTD.

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NON DISCUSSED E-POSTERS

20_ep - The MRI urethral rhabdosphincter's morphology in continent women

INTRODUCTION AND AIM OF THE STUDY

MRI is helpful to identify the urethra and urethral rhabdosphincter muscle. Aim of this study is to evaluate the normal values of the female urethra and urethral rhabdosphincter on MRI of subjectively continent women.

MATERIALS AND METHODS

This is a study of prospectively collected data regarding female patients who underwent pelvic MRI for benign gynecological pathologies and were subjectively continent.

Two radiologist evaluated the following urethral features: transverse and anterio-posterior (A-P) diameter. Urethral rhabdosphincter was also evaluated at the level of midurethra. Measurements included rhabdosphincter's thickness at the 3(R), 6(P), 9(L) and 12(A) o'clock position. Association of the above urethral features with patient's age, somatometric measurement and parity was statistically tested.

RESULTS

MRI measuraments of the urethral and urethral rhabdosphincter are presented in table 1.

Age and BMI values (table 2) were significantly correlated with the urethral transverse diameter.

CONCLUSIONS

The urethral rhabdosphincter seems to be thicker on the ventral and lateral sides of the urethra, and thinner on the dorsal side at the level of midurethra. With the proceeding of age urethral transverse diameter seems to increase without increase of the urethral rhabdosphincter thickness, fact that could be related with connective tissue deposition.

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Table 1. Urethral and urethral rhabdosphincter's parameters

	Mean	SD	Minimum	Maximum
Urethral A-P diameter (cm)	13.6	1.9	9.1	18.6
Urethral transverse diameter (cm)	14.5	1.8	10.9	21
R (cm)	1.8	0.3	1.2	2.6
A (cm)	1.5	0.4	0.9	2.8
L (cm)	1.6	0.3	1.1	2.4
P (cm)	1.2	0.4	0.7	2.5
(R+L)/2 (cm)	1.7	0.3	1.3	2.5

R: Urethral rhabdosphincter thickness at 9 o'clock

A: Urethral rhabdosphincter thickness at 12 o'clock

L: Urethral rhabdosphincter thickness at 3 o'clock

P: Urethral rhabdosphincter thickness at 6 o'clock

Table 2. Correlation coefficients of age and bmi with urethral and urethral rhabdosphincter's parameters

		AGE	BMI
Urethral A-P diameter (cm)	r	0.15	0.16
	p	0.129	0.109
Urethral transverse diameter (cm)	r	0.34	0.22
	p	**0.001**	**0.032**
R (cm)	r	0.21	0.04
	p	0.19	0.736
A (cm)	r	0.06	0.04
	p	0.539	0.715
L (cm)	r	0.07	0.01
	p	0.517	0.938
P (cm)	r	0.16	0.01
	p	0.126	0.890
(R+L)/2 (cm)	r	0.16	0.02
	p	0.113	0.881

R: Urethral rhabdosphincter thickness at 9 o'clock

A: Urethral rhabdosphincter thickness at 12 o'clock

L: Urethral rhabdosphincter thickness at 3 o'clock

21_ep . Assessment of patient satisfaction with intravesical botox injection under local anaesthetics in two centres in the North West of England

INTRODUCTION AND AIM OF THE STUDY

Intra-vesical Botulinum toxin type A (Botox) is recommended by NICE guidelines for management of overactive bladder (OAB) in the non-responders to medical treatment. It was traditionally done under general anaesthetics. However, in the recent years many hospitals have been offering the service under local anaesthesia in a clinic setting. Our objective was to measure patients' satisfaction with that new service.

MATERIALS AND METHODS

102 patients have participated in that study. The objectives were measured by using two validated tools which are, CSQ-8 "Client Satisfaction Questionnaire" ,that do not necessarily measure the clinical response, and numeric pain scale (NPS) to assess pain severity.

RESULTS

As for the NPS results, 64.7% have experienced mild or no pain. 32.9% scored between 4 and 8 on the NPS which is classified as moderate degree of pain. Only 2.9% have experienced severe pain.

CSQ-8 is the short version of the validated questions:

- 84.3% of patients rated our services as excellent.
- 85% of them stated that they definitely got the service they wanted and 75% of them had all their needs met.
- 82.3% would strongly recommend us to friends and family.
- The satisfaction rate of the amount of help received was 84%, which allowed patients to deal effectively with their problem.
- The overall satisfaction with the service was almost 85.3% and 88.2% mentioned that they will definitely come back in the future.

INTERPRETATION OF RESULTS

Intra-vesical Botox under Local anaesthesia is an effective and satisfactory in dealing with bladder over-activity. It is also cost effective compared to doing the procedure under general anaesthesia.

CONCLUSIONS

The new service have been met with excellent rates of patients' satisfaction and should considered as the standard service

22 ep - CO2-laser for the management of genitourinary syndrome of menopause: A randomized sham-controlled trial

INTRODUCTION AND AIM OF THE STUDY

CO_2-laser treatment (CO_2-laser) has been suggested as efficacious alternative for the management of genitourinary syndrome of menopause (GSM)[1]. However, randomized controlled trials are lacking and this has been stressed out by regulatory bodies and medical societies[2,3]. The aim of this double-blind randomized sham-controlled trial is to evaluate the efficacy of CO_2-laser treatments in postmenopausal women with GSM diagnosis and bothersome dryness and dyspareunia.

MATERIALS AND METHODS

Three CO_2-laser treatments (active-group) or 3 sham treatments (sham-group) were applied at monthly intervals. Primary endpoint was changes in dryness and dyspareunia intensity (assessed by the 10-cm VAS). Secondary endpoints were as follows: a) changes in FSFI (total score and all domains), itching, burning, dysuria (assessed by the 10-cm VAS), UDI-6, b) incidence of dryness, dyspareunia, sexual dysfunction, frequency, UUI and SUI, c) presence of adverse events. All outcomes were evaluated at baseline and 4-months post-baseline.

RESULTS

Fifty-eight women (28 in active-group and 30 in sham-group) were eligible to be included. Dryness, dyspareunia, FSFI, itching and burning were significantly improved in favor of the active group. Incidence of dryness, dyspareunia and sexual dysfunction was significantly decrease in the active group but not in the sham group. Incidence of frequency, UUI and SUI remained unchanged in both groups.

INTERPRETATION OF RESULTS

The findings of this first randomized sham-controlled trial confirmed that CO_2-laser treatments are effective in decreasing GSM symptoms. It should be emphasized though that CO_2-laser is effective in cases where dryness and dyspareunia are the most bothering symptoms, while further research is required on women with main symptoms from the lower urinary tract system.

CONCLUSIONS

CO_2-laser could be proposed as an efficacious alternative treatment for the management of GSM as it is superior than sham treatments.

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3. FDA Warns Against Use of Energy-Based Devices to Perform Vaginal Rejuvenation or Vaginal Cosmetic Procedures: FDA safety communication. Date Issued: July 30, 2018

23_ep - Searching the web about meshes and tapes

Introduction. Meshes and tapes have attracted a lot of negative publicity in view of their significant long term complication rates, which has put urogynaecology community under pressure. The aim of this study is to investigate if the relevant information available to the lay people on the internet is credible or biased towards medicolegal issues.

Material & Methods. We “googled” the key words “incontinence AND tape”, as well as “prolapse, cystocele, rectocele AND mesh” and recorded the 100 first results, looking at the nature and the quality of the source and the information and whether they focused on medicolegal implications. The search was conducted in February 2020 and included results in the english language.

Results. Of the webpages concerning tapes and meshes the majority were providing lay people information (56% and 64% respectively) and the rest were scientific journal articles. Of the former, 32% and 28% respectively were coming from sources such as scientific societies and academic institutions, while 19% and 28% from private web pages of doctors, medical supply companies or incontinence product merchants. Of the search results, 5% and 9% were focusing on medicolegal issues of tapes and meshes respectively, coming from patient support groups, insurance companies, the media and none from legal firms.

Conclusion. This review, although far from systematic, is indicating that the information a lay person comes across when searching the internet for information about tapes and meshes can be considered as reliable and balanced. Most webpages provide informative and educational content and some focus on the adverse outcomes and their medicolegal implications.

24_ep - Inflammatory lesion interfering with pelvic reconstructive surgery

Introduction. Posterior colporrhaphy for surgical repair of rectocele is usually of low anticipated risk but occasionally can be complicated by unforeseen coexisting problems. This study reports a case of posterior vaginal repair that was complicated by a pre-existing pelvic abscess.

Case report. A 68-year old patient with poorly controlled diabetes, dyslipidemia and BMI 21, presented with symptoms of vaginal prolapse. Clinical examination revealed cystocele, rectocele and cervical prolapse, with no other obvious pathology. Surgical vaginal repair was scheduled and three months later she was led to theatre. When she was put in lithotomy position after being anaesthetized, a purulent, foul smelling discharge was noted to be excreted from the rectum. Standard preoperative vaginal preparation and pressure on the posterior vaginal wall increased the amount of the discharge. An immediate surgical consult was sought, which was indeterminate of the concurrent pathology. The procedure was abandoned until diagnosis and treatment could be reached. A pelvic CT showed a sizeable pelvic abscess at the rectovaginal area. This kept draining through the rectum and was treated conservatively with antibiotics. On a later colonoscopy nothing abnormal was detected. Four months later she underwent an anteroposterior colporrhaphy and Manchster repair with no intra- or peri-operative events that could be attributed to the previous inflammation.

Conclusion. Uncontrolled diabetes may predispose to pelvic inflammation. Avoiding to operate on an inflamed field and postponing the operation was the best approach. In our case there were no intraoperative difficulties due to the previous infection, such as fibrosis that could impede proper tissue dissection.

25_ep - An update of current international guidelines and recommendations for the use of transvaginal meshes for POP and SUI.

INTRODUCTION AND AIM OF THE STUDY

Transvaginal synthetic mesh has been used since the early 1990s for the surgical management of pelvic organ prolapse (POP) and urinary incontinence (SUI). Following their success in abdominal hernia repair surgeries, polypropylene (PPL) meshes started to be used in the female pelvic floor. The thinking seems to have been that if these meshes implants worked well at one site of the body, they would work equally well at another site. However, mesh related complications led various scientific societies to question the use of synthetic meshes in the daily surgical practive. The aim of the present review was to compile and compare existing position statements from national and international professional associations and governmental agencies on the use of synthetic mesh for POP and SUI and summarize them to help disseminate important recommendations to surgeons who may not be aware of the existence and content of these recommendations

MATERIALS AND METHODS

We reviewed all published recommendations and statements in English of national and international professional associations and governmental agencies on use of synthetic vaginal mesh for the surgical management of SUI and POP.

RESULTS

Position statements were differentiated between the use of synthetic mesh in the treatment of POP (Table 1) and its use in the repair of SUI (Table 2).

INTERPRETATION OF RESULTS

The review found that there is much synergy and agreement among the identified statements on use of synthetic vaginal mesh for the surgical management of SUI and POP.

CONCLUSIONS

Gynecologic surgeons worldwide should become familiarized with reported outcomes resultant from the use of synthetic mesh in pelvic surgery. Surgeons from parts of the world where there is no professional body producing recommendations should pay particular attention to these statements and adopt the recommendations in their clinical practice.

26_ep - The role of laparoscopic surgery in the treatment of advanced uterine prolapse.-A systematic review of the literature.

INTRODUCTION AND AIM OF THE STUDY

The aim of this review is to investigate and compare all laparoscopic techniques that can be used in surgical repair of advanced uterine prolapse.

MATERIALS AND METHODS

A systematic search of the PubMed (1966–2018), Scopus (2004–2018), Cochrane CENTRAL (1996–2017) and Clinicaltrials.gov (2008–2017) databases was performed for articles published up to December 2020 using the combination of keywords ''severe pelvic organ prolapse" OR "advanced pelvic organ prolapse" AND ''laparoscopic surgery''. Only English-written studies, with patient sample ≥20 and follow-up time ≥12 months were included in this review.

RESULTS

Six studies included in the final synthesis. The main laparoscopic procedures reported were vaginally-assisted laparoscopic sacrocolpopexy (VALS) in 2 studies (33.3%), vaginally-assisted laparoscopic uterine sacropexy (VALUES) in 1 study (16,6%), laparoscopic sacrocolpopexy (LSC) plus laparoscopic supracervical hysterectomy (LSH) in 1 study (16.6%), laparoscopic inguinal ligament suspension (LILS) with uterine preservation in 1 study (16.6%) and laparoscopic uterosacral ligament suspension (LULS) combined with trachelectomy in 1 study (16,6%). All procedures involved mesh placement, except for LULS. Anatomical cure rates were reported 95.7-100% for VALS, 91.4% for VALUES, 97.6% for LSC plus LSH, 94.3% for LILS and 100% for LULS. VALS had the largest amount of intra-operative blood loss (310ml), VALUES was associated with bladder injuries (2.9%) and increased rates of de novo USI postoperatively (8.6%), whilst LILS reported the longest mean operative (163.8 ± 41.3 min) and hospitalization time (5 days). Cases of mesh extrusion were reported after VALS (2.1%) and VALUES (1.4%). Conversions were not reported.

INTERPRETATION OF RESULTS

Success rates were similar (>90%) for all types of laparoscopic intervention, with patients reporting high satisfaction rates (85.7-100%) during a follow-up time ranging from 12 months to 7 years, depending the study.

CONCLUSIONS

It seems that minimal invasive surgery can be used with safety and efficacy as an alternative to open surgery in the treatment of severe uterine prolapse.

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27_ep - COMPARISON OF PAIN CHARACTERISTICS BETWEEN PATIENTS WITH OVER ACTIVE BLADDER AND HEALTHY CONTROLS AND DETERMINATION OF PAIN RELATED FACTORS IN OVER ACTİVE BLADDER

INTRODUCTION AND AIM OF THE STUDY

Limited studies demonstrated that pain levels associated with bladder symptoms were significantly higher in women with over active bladder (OAB) than in healthy women (1,2). However, there wasn't found any study which investigated general pain perception and pain threshold changes in patients with OAB. The aim of this study was to evaluate the pain intensity and quality of life in female patients with OAB and to examine whether they differ from the healthy controls.

MATERIALS AND METHODS

The study included 28 women who were diagnosed with OAB and 28 healthy women who agreed to participate in the study. The participating women were evaluated by McGill Pain Questionnaire for pain intensity and pain quality; Self-Leeds Assessment of Neuropathic Symptoms and Signs for the presence of neuropathic pain and Algometry for the pain threshold level. Overactive Bladder Screening Tool, Incontinence Impact Questionnaire and Urogenital Distress Inventory were used to evaluate OAB symptoms and lower urinary tract symptoms of women included in the study. Nottingham Health Profile questionnaire (NHP) was used to determine quality of life and general health status.

RESULTS

It was found that women with OAB had lower pain threshold compared to healthy women. The evaluation of the women with OAB in respect of McGill Pain Questionnaire revealed that there was a positive correlation between OAB symptom severity and pain intensity ($p< 0,05$), whereas the evaluation of the women with OAB and healthy women in respect of NHP questionnaire revealed that the women with OAB had lower quality of life ($p< 0,05$).

INTERPRETATION OF RESULTS

it was found that overactive bladder results in a decrease in the quality of life and pain threshold of women and an increase in both sensory and affective qualities of pain. This result, independent of the effect of OAB on emotional state, confirms the theory that central sensitization predisposes to pain syndromes in the pathophysiology of OAB. In addition, it was observed that the severity of pain increased in parallel with the severity of symptoms in these patients.

CONCLUSIONS

According to these results, it can be emphasized that patients with OAB may be predisposed to pain syndromes as well as lower urinary tract symptoms and that clinicians should take this into consideration during the evaluation of patients.

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