

Volume 10, Supplement, June 2024

ISSN 2772-9737

Continence

The Journal of the
International Continence Society

ABSTRACT OF THE NATIONAL CONGRESS OF
THE ITALIAN SOCIETY OF URODYNAMICS (SIUD)

Catania, Italy, 20–22 June 2024

Edited by: Lori Birder



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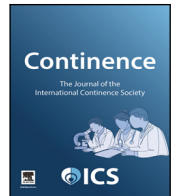
**The Journal of the
International Continence Society**

**Abstract of the National Congress of the
Italian Society of Urodynamics (SIUD) –
Catania, Italy, 20–22 June 2024**

**Publication of this supplement is supported by the
Società Italiana di Urodinamica – SIUD**



**Società Italiana di Urodinamica
Continanza Neuro-Urologia Pavimento Pelvico**



ABSTRACTS OF THE NATIONAL CONGRESS OF THE ITALIAN SOCIETY OF URODYNAMICS (SIUD) CATANIA, 20–22 JUNE 2024

1 - Energy vs energy-free dissection of the vascular pedicles during robot assisted radical prostatectomy: A prospective study to investigate early functional outcomes

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Introduction and aim of the study: The utilization of electrocautery during the dissection of the vascular pedicles (VPs) in robot-assisted radical prostatectomy (RARP) is still a matter of debate. The energy use might result in thermal injury to the neurovascular bundles (NVB), impacting their sparing. Our study aims to evaluate the early recovery of urinary continence and erectile function, comparing athermal dissection (AD) and touch electrocautery (TE) of the VPs.

Materials and methods: From May 2020 to May 2023, we prospectively enrolled patients with low-risk localized PCa who underwent nerve-sparing intra-/interfascial RARP with the Montsouris technique. One experienced surgeon performed all procedures. The patients were divided into two groups: Group A underwent RARP with the AD technique, and Group B with the TE technique. Men who received previous prostatic surgery, who had a diagnosis of urinary incontinence, and an International Index of Erectile Function (IIEF-5) score < 10 or adjuvant therapies were excluded. All patients removed the catheter seven days post-op. Continence was evaluated at 15, 30, and 90 days after catheter removal. Post-operative continence was defined as the use of 0 pads/day. All patients received PDEI-5 at catheter removal, and potency was evaluated with IIEF-5 at 30-, 90-, and 180-days post-op.

Results: 107 subjects were prospectively enrolled and divided into 2 groups: Group A, 52 patients (mean age 61.2 y.o.), and Group B, 55 patients (mean age 63.1 y.o.). In Group A, the 15, 30, and 90-day continence rates were 41/52 (78.9%), 45/52 (86.5%), and 49/52 (94.2%), respectively. In Group B, the 15, 30, and 90-day continence rates were 39/55 (70.1%), 43/55 (78.2%), and 47/55 (92.4%), respectively. Mean pre-operative IIEF-5 scores were 20.9 in Group A and 21.3 in Group B. A statistically significant difference in terms of urinary continence recovery was observed comparing group A and B at 15 and 30 days postop ($p < 0.05$), this difference disappeared at 90 days postop ($p = 0.198$).

When considering potency rates, the mean IIEF-5 scores at 30, 90, and 180 days were 9.2, 11.7, and 15.4, respectively, in Group A. In Group B, the mean IIEF-5 scores were 7.8, 9.7, and 14.7 respectively, at 30-, 90-, and 180-days post-op with a statistically significant difference between the two groups at 30 and 90 days ($p < 0.05$), but this difference was not confirmed at 180 days ($p = 0.213$). In logistic regression, age, BMI, and pre-operative IIEF-5 resulted as significant predictive factors for potency recovery.

Conclusions: During RARP, athermal dissection of the prostatic vascular pedicles impacted both continence and potency rates when comparing it with the utilization of monopolar and/or bipolar touch electrocautery. Age, BMI, and pre-operative erectile function were statistically significant predictive factors for post-operative potency rates recovery.

Continence 10S (2024) 101229

doi: <https://doi.org/10.1016/j.cont.2024.101229>

2 - Functional outcomes of robot-assisted radical prostatectomy performed with the novel Hugo robotic system: Our experience with first 100 cases

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Introduction and aim of the study: In an era where surgical robotic platforms are cost-prohibitive for many patients in poor countries, the Hugo™ RAS system is emerging as an innovative and cheapest solution.

There are currently few available data on the outcomes of robot-assisted radical prostatectomy (RARP) performed using this system, especially concerning urinary continence and sexual function. In this scenario, we aim to report functional outcomes of patients undergoing RARP with the Hugo™ RAS system.

Materials and methods: A prospective evaluation was conducted in an Italian tertiary referral center.

From April 2022 to July 2023, 100 consecutive patients who underwent RARP with the Hugo™ RAS system were included. Three surgeons, already experienced with the Da Vinci platform, performed all procedures. Preoperative, intraoperative, and postoperative data were collected and analyzed.

Urinary continence rate was evaluated with daily pad count and 24-hours pad weight at 3 mos and at 6 mos. Cure was defined as no pad usage, and social continence was defined as the use of no more than one pad per day.

Erectile function was defined as “erection hard enough for penetration more than half of the time after sexual stimulation”.

Results: Among 100 included patients, the median age was 66.5 years (interquartile range [IQR] 62–72), and the median BMI was 26 (24.22–28). Fifty-five patients (49%) underwent nerve-sparing procedure.

The cure rate was 31% (95 CI: 22–41) and 61% (95 CI: 49–71) at 3 and 6 mos, respectively. The social continence rate was 76% (95 CI: 60–93) and 86% (95 CI: 67–98) at 3 and 6 mos, respectively. The mean (\pm SD) PAD weight was 394.58 g (\pm 517) and 240 g (\pm 443) at 3 and 6 mos, respectively. The mean PAD number usage was 1.27 (\pm 1.40) and 0.68 (\pm 1.02) at 3 and 6 mos, respectively.

Eighty-one patients were considered potent preoperatively of which 88% underwent a nerve-sparing procedure. At 6-mos follow-up, 31% (25/81) of nerve-sparing cases preserved sexual potency.

Interpretation of results: Our experience with the first 100 cases of RARP performed with the Hugo™ RAS system has shown satisfactory outcomes in terms of urinary continence and erectile function, in compliance with those reported in previous robotic series. The notable proportion of patients achieving social continence within the first year is particularly encouraging.

Conclusions: Our early postoperative findings underscore the safety and feasibility of the Hugo™ RAS system in performing RARP, also with regard to functional outcomes. Our results also confirm the good transferability of clinical outcomes from a platform to another. Further studies with extended follow-up periods are necessary to validate and reinforce these observations.

Continence 10S (2024) 101230

doi: <https://doi.org/10.1016/j.cont.2024.101230>

3 - Preliminary findings from a single center's experience with Optilume® Drug-Coated Balloon in the Management of Recurrent Male Urethral Strictures and Bladder Neck Sclerosis

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Introduction and aim of the study: Male urethral stricture is a disease with a high rate of recurrence and the need for multiple endoscopic procedures or complex reconstructive surgery. In this report, we present the preliminary findings of a study conducted to assess the safety and effectiveness of the Optilume® drug-coated balloon (DCB) in men with recurrent urethral strictures and bladder neck sclerosis (BNS). The Optilume® DCB can be applied using conventional rigid cystoscopy, eliminating the need for general anesthesia and allowing for the procedure to be performed in an office setting.

Materials and methods: The study involved 14 male patients with urethral strictures or BNS measuring 2 cm or less in length. All procedures were performed by two experienced endoscopic surgeons. Patients were evaluated preoperatively and in follow-up with the International Prostate Symptom Score (IPSS), uroflowmetry results, post-void residual urine volume (PVR), and erectile function (IIEF-5). Complications were classified with the Clavien Dindo score.

Results: A total of 14 patients were treated with Optilume in a single center: 11 patients with recurrent bulbar urethral strictures and 3 with post-prostate surgery BNS. The mean follow-up period was 6 months. No severe complications were reported (Clavien II–IV). Average IPSS improved from 23.2 at baseline to 9.4 at 6 months ($p < 0.0001$). The IPSS QoL also showed a significant improvement, changing from an initial mean of 5.3 ± 1.3 to a value of 2.3 ± 1.7 ($p < 0.0001$) at one month after and remained consistent at six months with a value of 2.4 ± 1.4 ($p < 0.0001$). Notably, starting from 7.45 mL/s, a significant improvement in mean Qmax was observed, with average values of 21.6 ± 6.9 mL/s at the initial one-month evaluation ($p < 0.0001$), and these results were sustained at the second evaluation after 6 months, with values of 21.4 ± 6.4 mL/s ($p < 0.0001$). Erectile function exhibited slight improvement post-surgery and was maintained over the subsequent 6 months, with mean IIEF-5 scores of 15.6 ± 5.6 at baseline compared to 18.9 ± 7.9 after 6 months. None of the patients reported any significant complications or ejaculatory dysfunctions. Only mild bladder storage symptoms in the first two weeks after the procedure were recorded.

Conclusions: The Optilume® Catheter System is a novel minimally invasive procedure for the treatment of recurrent urethral strictures and BNS, combining mechanical and pharmacological effects. While maintaining erectile and ejaculatory function, treatment with DCB leads to immediate and sustained improvements in voiding symptoms, flow rate, and quality of life for the patients. Our preliminary findings suggest that the treatment is well-tolerated and can be effectively carried out in an office setting.

Continence 10S (2024) 101231

doi: <https://doi.org/10.1016/j.cont.2024.101231>

4 - Continence outcomes post robot-assisted radical prostatectomy with the novel Hugo robotic system: A random effect pooled analysis

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Introduction and aim of the study: Robot-assisted radical prostatectomy (RARP) is the preferred treatment for localized prostate cancer. With the Intuitive patent expiring after years of dominating the medical robot system market, multiple alternatives are now developing. The Hugo™ robotic assisted surgery (RAS) system is emerging as an innovative and cost-effective solution, however, there is a lack of evidence on the surgical and functional outcomes after RARP performed with this new platform.

We aimed to summarize the published evidence about continence outcome post-RARP performed with the Hugo™ RAS system by systematic review and pooled analysis.

Materials and methods: PubMed, Embase, Web of Science, and Scopus databases were searched from inception to December 2023 for observational or randomized studies evaluating males who underwent RARP with the Hugo™ RAS system, with at least ten analyzed patients. Risk of bias (RoB) was assessed independently by two authors. Pooled estimates were obtained using event rates for dichotomous variables. A median-based method was used for the pooled estimation of the continuous outcomes. Cochrane's Q-test and I² statistic were used to assess heterogeneity. In the case of substantial heterogeneity (I² >50%), we used a random-effect model and attempted to investigate and explain the heterogeneity using a leave one-out sensitivity analysis. Subgroup and meta-regression analyses were carried out to investigate sources of heterogeneity.

Results: Data on urinary continence status three months after surgery was reported in six studies, including 365 patients. High RoB was revealed for three studies. We summarized the evidence using the definition of social continence (use of no more than one pad per day). No studies reported the cure rate (no pad use).

The pooled rate of social continence at 3 mth after surgery was 86% (95% CI 74.4%–90.9%; $p < 0.001$; I² = 77%).

One study of 112 patients indicated that the median time to urinary continence recovery was 36 days (95% CI 34–44). The probability of urinary continence recovery was 36% (95% CI 28%–47%) at 1 mth and 81% (95% CI 72%–89%) at 3 mth.

The findings of the primary analyses were stable at leave-one-out analysis. The subgroup and univariate meta-regression (using sample size, risk of bias, age and BMI as covariates) did not explain statistical heterogeneity.

Interpretation of results: This is the first review aimed to summarize the available evidence on functional outcomes after Hugo-RARP. Our results indicate that the Hugo™ RAS system achieved satisfactory social continence rates post-surgery (86% at three months), mirroring the outcomes of other robotic platforms.

Conclusions: In conclusion, while recognizing the preliminary nature of the evidence, the inclusion of studies at high-risk of bias, and the substantial heterogeneity, this systematic review and pooled analysis highlighted the safety and feasibility of the Hugo™ RAS system regarding functional outcomes after RARP.

Continence 10S (2024) 101232

doi: <https://doi.org/10.1016/j.cont.2024.101232>

5 - Illustration of perioperative and urodynamic outcomes in patients undergoing robot-assisted radical cystectomy with intracorporeal Y-modified neobladder (“Bordeaux neobladder”) reconstruction

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Introduction and aim of the study: Orthotopic neobladder (ONB) reconstruction is a valid alternative to the ileal duct in suitable patients that are motivated to undergo adequate training of the neobladder. Careful patient selection, as well as an adequate recovery protocol after surgery, are integrated into the success of this procedure. Various techniques for orthotopic neobladder (NB) are currently used and have shown satisfactory outcomes. We aim to show our standardized technique of NB with the evaluation of patients (pts) who undergoing robot-assisted radical cystectomy with intracorporeal reconstruction RARC for bladder cancer in a high-volume referred centre.

Materials & methods: In our centre 41 pts were selected for neobladder reconstruction from 2018 to June 2023. All the procedures were performed by the same surgeon. All the pts were selected for our enhanced recovery after surgery (ERAS) protocol. The technique for the ONB reconstruction was intracorporeal Y-modified neobladder (“Bordeaux Neobladder”). The data were collected and recorded partly retrospectively and partly by compiling a prospectively database. Clinical data were available for each patient. The urodynamic test was performed three months after surgery.

Results: Median age was 66 yrs (range 49–77), mean BMI was 25,8 (range 18–31). The operative time, the mean time for bladder reconstruction was 192 min. The median length of hospital stay was 11,9 (range 5–20). In 4 pts SNG was repositioned after 48 h from RARC because of nausea and vomit. Mean bowel canalization was 2,7 days postoperative and mean stool canalization was 5 days later for both groups. 21 patients (57,6%) developed complications of these 17 were CD < 2 (11 urinary infection or sepsis and bowel canalization, 4 anemizations, 2 lymphocele) and in 2 cases CD > 3b for abdominal occlusion and accidental ureteral stent removal. 25 patients were underwent to urodynamic evaluation at 3 months follow up. Daytime and nighttime continence rate was respectively 60% (15/25) 0-1pad and 19/25 (67%) 0-1 pad. Mean maximum capacity was 431 cm³ (range 200–553), with first sensation of bladder fullness was

perceived at an average volume of 337 cm³ (150–500). The average compliance was 27 ml/cm H₂O and the mean post-void residual was 101.6 ml (0–310). Only 2/25 (8%) patients showed hydronephrosis of the left kidney, of grade I and II respectively.

Conclusions: A totally intracorporeal RARC with intracorporeal modified-Y ONB is feasible in experienced robotic centres with good patient selection and with an adequate recovery protocol after surgery. The analysis of the parameters of urodynamic demonstrate that has adequate capacity, acceptable PVR, and satisfying compliance.

Continence 10S (2024) 101233

doi: <https://doi.org/10.1016/j.cont.2024.101233>

6 - Bladder instillations of Adelmidrol+ Sodium Hyaluronate in patients with symptomatic actinic cystitis: Efficacy of the treatment

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Introduction and aim of the study: To evaluate the effect of bladder instillation of Adelmidrol+ Sodium Hyaluronate in patients with symptomatic actinic cystitis (AC).

Materials and methods: We included all consecutive patients diagnosed with symptomatic AC (increased urinary frequency, macrohematuria, urinary urgency with or without incontinence episodes) between 02/2020 and 03/2023. All patients underwent 8 weekly bladder instillations of a solution composed of 1000 mg of Adelmidrol and 50 mg of Sodium Hyaluronate, postponing micturition for at least 60 min. Clinical data was extracted from the hospital clinical records at the beginning and at the end of the 8 weeks treatment protocol. We evaluated pain with the VAS score, urinary symptoms and macroscopic hematuria episodes with voiding diaries. We defined a significant reduction of the VAS score if ≥ 2 . The results were analyzed with the Sign Rank Test, P -values ≤ 0.05 were considered significant.

Results: We treated 30 patients (10F,20M) with median age of 68 years. Most patients had RT for prostate cancer (47%), hematologic disorders (21%) and gynaecological cancer (18%). 83.3% of patients experienced gross hematuria, 90% urgency, 43% urgency incontinence and 66.6% pelvic pain score ≥ 3 . We had a reduction of gross hematuria in 76% of patients, a significant reduction of the VAS score in 66% and an improvement of urgency in 56.7% (all $p < 0.0001$); incontinence change did not have statistical significance (Table 1).

Table 1

Pre- and post-treatment symptoms.

	Pre-treatment		Post-treatment		Variation	
	N	%	N	%	N	%
Hematuria						
Present	25	83,3%	2	6,7%		
Absent	5	16,7%	28	93,3%		
Improvement					23	76,7%
Unchanged					7	23,3%
						p <0.0001
Urgency						
Present	27	90%	10	33,3%		
Absent	3	10%	20	66,7%		
Improvement					17	56,7%
Unchanged					13	43,3%
						p <0.0001
Urgencyincontinence						
Present	13	43,3%	9	30%		
Absent	17	56,7%	21	70%		
Improvement					5	16,7%
Unchanged					24	80%
Worsened					1	3,3%
						p = 0,2128
VAS						
Min	0		0			
Median	3		0			
Max	8		7			
Mean	3,8		1,1			
Std	2,57		1,64			
StdErr	0,469		0,299			
						p <0.0001

Interpretation of results: Adelmidrol+hyaluronic acid exerts its action limiting histological damage, neutrophil and mast-cells infiltration, ameliorating pain-related responses during an acute or chronic inflammatory process; it has an anti-inflammatory mechanism, restoring the physiological level of Palmitoylethanolamide in the bladder wall interstice, thus having a significant effect on reducing the inflammatory infiltrate and gross hematuria and with a restorative effect on the bladder surface.

Conclusions: A cycle of 8 weekly intravesical instillations of Adelmidrol in combination with sodium hyaluronate appear to be effective in reducing episodes of gross hematuria, pelvic pain, and urgency in patients experiencing AC; however, it was ineffective on urgency incontinence episodes.

Continence 10S (2024) 101234

doi: <https://doi.org/10.1016/j.cont.2024.101234>

7 - Is sacral neuromodulation complementary to tibial nerve stimulation, and viceversa? A retrospective study in neuro-urological patients

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Introduction and aim of the study: The primary aim of this study is to conduct a comprehensive comparison of the therapeutic efficacy between Percutaneous Tibial Nerve Stimulation (PTNS) and Sacral Neuromodulation (SNM) in individuals with incomplete spinal cord lesions experiencing neurogenic lower urinary dysfunction (NLUTD).

Materials & methods: This retrospective study investigates the efficacy of PTNS and SNM in the management of NLUTD. Subjective and objective response in patients received both therapies was evaluated. To assess treatment outcomes, objective responders were categorized based on achieving an amelioration $\geq 50\%$ compared to baseline. Parameters of 3-days bladder diary were: number of episodes of urgency and/or urgency incontinence, frequency, post-voiding volume residual and total daily number of intermittent catheters. Subjective response was defined as a PGI-I score > 3 after both treatments.

Results: Fifteen patients were included (13 males and 2 females — mean age 55.8 ± 11.05) of which 6 (40%) were affected by incomplete SCI and 9 (60%) by peripheral neuropathy. Isolated neurogenic non-obstructive urinary retention (NNOUR) was the cause of NLUTD in 7/15 patients, 6 (40%) had concomitant storage and voiding dysfunctions, whereas 2 (13%) complained only neurogenic detrusor overactivity symptoms (NOAB). First treatment offered was SNM in 10 (66%) and PTNS in 5 (33%). Subjective response after 1° SNM treatment was found in 2 (13%). 6 (40%) previously failed at NMS test showed a PGI-I > 3 after PTNS. None of the patients previously failed to SNM or PTNS were objective responders to the alternative treatment.

Interpretation of results: SNM and PTNS are believed to work on similar principles and target the same indications. However, only two studies have evaluated SNM efficacy following PTNS. Our data indicate that a negative response to one treatment seems to preclude a trial of the alternative one, since none of the patients objectively failed with SNM or PTNS subsequently had a successful response to the second chance. Unlike the literature, most of our patients was previously treated with SNM and not vice versa.

Conversely to the objective outcomes, 6 (40%) patients who unsuccessfully attempted NMS before, perceived a satisfying improvement after PTNS (PGI-I > 3).

Conclusions: To our knowledge, this study represents the first comparison of outcomes between SNM and PTNS in patients with NLUTD. In our cohort, a history of treatment failure predicts the ineffectiveness of the alternative treatment. Despite our adherence to objective criteria, a subjective positive impact was observed in 40% of cases treated with PTNS following SNM failure. Larger-scale studies to confirm our data also using symptoms and QoL questionnaires are needed.

Continence 10S (2024) 101235

doi: <https://doi.org/10.1016/j.cont.2024.101235>

8 - Impact of anesthetic risk on feasibility, complications and outcomes of males treated with Rezum procedure for bladder outlet obstruction

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Introduction and aim of the study: To assess the impact of patient's anesthetic and general conditions on feasibility and complications of Rezum for bladder outlet obstruction (BOO).

Materials and methods: In this prospective study, patients undergoing Rezum for BOO were stratified according to ASA score: ≤ 2 in group 1 (G1), ≥ 3 in group 2 (G2). Preoperative and at 3-mos evaluation comprised: uroflowmetry (UF), post-void urine residual (PVR), symptomatic and quality of life (QoL) questionnaires. The focus was the surgical feasibility and complications, so all controls were at 3-mos. Minor complications were Clavien–Dindo (CD) ≤ 2 , major ≥ 3 .

Results: We enrolled 47 pts underwent Rezum (January–September 2023): 26 (55.3%) pts in G1, 21 (44.7%) pts in G2. All pts had significant improvement in Qmax, PVR, IPSS, QoL, while no significative worsening was recorded on OAB symptoms and sexual function (Table 1). In 77% of 13 pts with indwelling catheter, micturion was restored. Mean surgical duration time was 12 min. No major complications were recorded; minor adverse events were 10 (21.2%): 2 CD score 2, 8 CD score 1. G1 had 1 CD score 2 (urinary infections with fever), and 5 CD score 1 (urinary transient retention). G2 had 1 CD score 2 (hematuria managed with 2 days catheterization) and 3 CD score 2 (urinary transient retention). No pts required readmission or surgical treatment, no re-treatment was performed for BOO. Subjective satisfaction (PGI-1 questionnaire) was similar in the groups: 2 and 2.1 score in G1 and 2, respectively. Also Qmax, PVR, IPSS, QoL were comparable between groups: Qmax 13.2 vs 13.8, PVR 54 vs 56 ml, IPSS 10 vs 10, QoL 2.1 vs 2.2, in G1 and 2 respectively. No statistical p was recorded.

Interpretation of results: Rezum was feasible and successful, with only minor complications, even in patients at higher anesthetic risk who would potentially not have undergone surgery for BOO. Rate of success and adverse events was comparable in the 2 groups. The short duration of surgical times that allow for mild sedation may have favored the possibility of managing categories of patients at greater risk with this procedure, likely avoiding pts from severe complications and/or anesthetic problems in the postoperative period.

Conclusions: Rezum was safety and successful in pts at lower and higher anesthetic risk; general conditions of patients did not impact on surgical outcomes and complications.

Table 1
Patients outcomes.

	Baseline	Post-treatment 3-mos	p-value Confidence level (95)
Qmax Median (p25 – p75)	9 (8 – 13)	13 (11 – 15)	0.05*
PVR Median (p25 – p75)	150 (30 – 270)	30 (10 – 60)	0.05*
IPSS Mean (sd)	15.1 (6.9)	10 (6.4)	<0.001*
QoL Mean (sd)	3.9 (1.3)	2.3 (1.4)	<0.001*
IIEF5 Mean (sd)	12.7 (8.6)	15.4 (8.9)	0.502
OAB Mean (sd)	22.3 (14.7)	26.9 (11.4)	0.225

Continence 10S (2024) 101236

doi: <https://doi.org/10.1016/j.cont.2024.101236>

9 - Urinary incontinence and its impact on neglected sexual dysfunctions after robot-assisted radical prostatectomy—A tertiary referral center experience

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Introduction and aim of the study: Robot-assisted radical prostatectomy (RARP) can lead to long-term side effects like erectile dysfunction (ED) and urinary incontinence (UI). A cluster of neglected sexual side effects may occur and often remain undiagnosed: orgasm-related pain, climacturia, anorgasmia, loss of libido, penile shortening, and penile dysesthesia. This study aims to evaluate impact of UI on sexual dysfunctions, mental health, and marital relationships.

Materials and methods: A cross-sectional study was conducted in an Italian tertiary referral center. 96 patients who underwent RARP from January 2018 to December 2021 were enrolled. Inclusion criteria were at least 12 months follow-up and preoperative sexual activity (IIEF-5 \geq 13). Data were collected at baseline and one-year follow-up visit, using self-administered questionnaires: University of California Los Angeles-Prostate Cancer Index (UCLA-PCI), IIEF-15, dyadic adjustment scale (DAS), Sexual Satisfaction Scale for Men (SSS-M), Hospital Anxiety and Depression Scale (HADS), and Orgasmic Dysfunctions Questionnaire (ODQ). UI was defined as any pad usage. ED was defined as IIEF-15-erection domain <17 . Correlation analysis, chi-square test, and t-test were used. Statistical significance was defined as p -value < 0.05 .

Results: UI was found in 44 (46%) patients at 12 months from RARP. ED was observed in 62 (65%) patients.

A statistically significant association was found between UI and ED (mean IIEF-15-erection domain: 11.1 vs 15.6, incontinent group -IG- vs continent group -CG-, $p = 0.008$), climacturia (mean climacturia's domain in ODQ: 7.8 vs 6.2, IG vs CG, $p < 0.001$), anorgasmia (mean anorgasmia's domain in ODQ: 8.03 vs 6.09, IG vs CG, $p = 0.01$), worse marital relationship (mean DAS score: 86.2 vs 90.4, IG vs CG, $p = 0.034$), sexual dissatisfaction (mean SSS-M score: 52.4 vs 57.9, IG vs CG, $p = 0.014$), and anxiety/depression (mean HADS score 42.1 vs 47.5, IG vs CG, $p = 0.048$).

Interpretation of results: Post-prostatectomy UI is associated with a multifaceted impact on postoperative patients' sexuality. Although a causative effect cannot be inferred by our study design, these findings have at least two important clinical implications: the importance of a timely UI treatment and the significant incidence of several neglected post-surgical sexual side effects. Our results comply with studies reporting better sexual function after UI treatment in post-RARP patients.

Conclusions: UI after RARP is not just a bothersome disorder limited to the lower urinary tract, but it may affect several aspects of patients' sexuality, including libido, erectile and orgasmic function, sexual satisfaction, mental health, and marital relationships. Further research is needed to better understand the cause-effect relationship between post-RARP UI and sexual disorders.

Continence 10S (2024) 101237

doi: <https://doi.org/10.1016/j.cont.2024.101237>

10 - Transperineal laser ablation of the prostate (TPLA) for the treatment of LUTS due to Benign Prostatic Obstruction: Results from the largest prospective single-center series in literature

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Introduction and aim of the study: In this work, we aim to report the efficacy and safety outcomes from the first single-center cohort of 100 consecutive patients treated with ultrasound-guided SoracteLite™ transperineal laser ablation of the prostate (TPLA) for LUTS due to Benign Prostatic Obstruction (BPO).

Materials and methods: From April 2021 to July 2023, data of 100 consecutive patients undergoing TPLA at our center were prospectively collected. Procedures were performed under local anesthesia and in an outpatient setting. Primary endpoints were the change in International Prostatic Symptoms Score (IPSS) and Quality of Life (QoL), maximum flow rate (Qmax), Post Void Residual (PVR), and Male Sexual Health Questionnaire (MSHQ 3-items) at baseline, 3, 6 and 12 months follow up.

Results: Overall, the median age was 66.5 years (IQR 60–75). Median prostate volume at transrectal ultrasound was 50 (40–70). Of 100 patients, 81 (81%) were under BPO medical therapy and 24 (24%) were under antiplatelet/anticoagulant therapy at the time of surgery. Median follow-up was 12 months (IQR 6–18). Data about symptoms and uroflowmetry parameters are depicted in Table 1. A study cohort's stratification based on IPSS scores into mild (0–7), moderate (8–19), and severe (20–35) classes revealed an increase in patients classified as mild and a decrease in those categorized as severe across various time points. 9/14 patients (64.3%) with an indwelling catheter before TPLA, achieved spontaneous micturition after the procedure. The treatment-free rate at last follow-up was 93%, with 7 patients needing a different procedure to improve their symptoms.

Antegrade ejaculation was preserved in all sexually active patients after the procedure. No postoperative Clavien–Dindo>2 complications were recorded.

Table 1

	Baseline	3 months	P	6 months	P	12 months	P
Median Qmax (mL/s) (IQR)	9.1 (6.9–12)	11 (8.8–14.8)		11 (8.5–16.0)		13 (8.5–16.9)	
Median Δ Qmax (mL/s) (IQR)	2.4 (0.1–4.4)		<0.001	2.5 (0.8–5.9)	<0.001	3.9 (1.6–7.3)	<0.001
Median IPSS (IQR)	18 (15–23)	10 (6–13)		10 (5.7–14)		10 (5–16.5)	
Median Δ IPSS (IQR)	–9 (–13––5)		<0.001	–9 (–13––4)	<0.001	–9 (–16––3)	<0.001
Median QoL (IQR)	4 (3–4)	2 (1–3)		2 (1–3)		2 (1–3)	
Median Δ QoL (IQR)	–2 (–3––1)		<0.001	–2 (–3––1)	<0.001	–2 (–1––3)	<0.001
Median MSHQ 3 item (IQR)	6 (2–11)	10 (5–13)		11 (5–14)		9 (5–13)	
Median Δ MSHQ 3 item (IQR)	2 (0–4)		<0.001	2 (0–5)	<0.001	4 (1–5)	<0.001
Median PVR (mL) (IQR)	90 (50–150)	45 (20–77.5)		50 (20–90)		45 (1.2–87.5)	
Median Δ PVR (IQR)	–45 (–82.5––7.5)		<0.001	–50 (–92.5–0)	<0.001	–60 (–103.7––22)	<0.001

Interpretation of results: TPLA delivers substantial clinical advantages in terms of voiding function and enhanced quality of life, ensuring the preservation of ejaculatory function.

Conclusions: TPLA stands as a viable and secure therapeutic approach for addressing symptomatic BPO.

11 - Transperineal interstitial Laser Ablation (TPLA) of the prostate for multimorbid and high-risk patients with BPO: Could it be the right option? Data from a single center, prospective registry

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Introduction and aim of the study: Standard surgical techniques for benign prostatic obstruction (BPO) are still not devoid of side effects, requiring general or spinal anesthesia and hospitalization. Furthermore, suspension of “life-saving” drugs like anticoagulants or antiplatelets is often required. Transperineal interstitial laser ablation (TPLA) of prostate is an ultra-minimally invasive technique that has shown promising results in preliminary series. Our work aims to evaluate functional and safety outcomes in multimorbid and high-risk patients undergoing TPLA for LUTS due to BPO.

Materials and methods: Data from consecutive patients undergoing TPLA between April 2021 and July 2023 were collected. Inclusion criteria were: moderate to severe LUTS (International Prostatic Symptoms Score ≥ 8); prostate volume ranging from 30 to 100 mL and an ASA score ≥ 3 . Procedures were performed in an outpatient setting using local anesthesia. Data regarding functional outcomes evaluated by validated questionnaires – International Prostatic Symptoms Score (IPSS), Quality of Life (QoL) – and uroflowmetry parameters – maximum flow rate (Qmax) and Post-Void Residual (PVR) – were recorded pre- and postoperatively at scheduled follow-up (FUP) visits.

Results: Overall, 29 patients were enrolled with a median age of 75 (IQR 67–81.5). Median follow-up time was 12 months (IQR 6.5–15). Median prostate volume was 45 mL (IQR 39–69); IPSS and QoL were 19 (IQR 14–26) and 4 (IQR 3–5), 10 (IQR 5–15) and 1 (IQR 1–3), 10 (IQR 6.5–16.5) and 2 (IQR 1–3), and 12 (IQR 9–19) and 1 (IQR 1–4) at baseline, 3-, 6- and 12-months FUP; no significant changes in Qmax whilst a significant reduction in PVR at 6 months were observed. 6 of 8 patients (75%) with an indwelling catheter before the procedure recovered spontaneous micturition at the last follow-up. No Clavien–Dindo grade ≥ 2 postoperative complications were recorded.

	Baseline n = 29	3 months n = 28	p	6 months n = 20	p	12 months n = 12	p
Median Qmax (mL/s) (IQR)	9,3 (7,01–11,53)	9,80 (8,35–13,85)		9,20 (8,35–11,65)		9,85 (5,85–11,83)	
Median Δ Qmax (mL/s) (IQR)	1,25 (–0,05–3,45)		0,058	0,60 (–0,60–5,00)	0,214	0,40 (–0,80–4,00)	0,352
Median IPSS (IQR)	19 (14–26)	10 (5–15)		10 (6,5–16,5)		12 (9–19)	
Median Δ IPSS (IQR)	–9 (–11––6)		<0.001	–7 (–13––5)	<0.001	–7 (–19––3)	0,016
Median QoL (IQR)	4 (3–5)	1 (1–3)		2 (1–3)		1 (1–4)	
Median Δ QoL (IQR)	–2 (–3––1)		<0.001	–2 (–2––1)	<0.001	–2 (–2––1)	0,007
Median PVR (mL) (IQR)	100 (62,5–127,5)	45 (7,50–97,5)		55 (7,50–115)		60 (50–100)	
Median Δ PVR (IQR)	–50 (–50–0)		0,244	–50 (–70––5)	0,017	–10 (–65–20)	0,223

Interpretation of results: In our preliminary experience, TPLA appears to be a safe and feasible minimally invasive option for LUTS due to BPO even in high-risk patients.

Conclusions: TPLA shows promising functional and safety outcomes.

Continence 10S (2024) 101239

doi: <https://doi.org/10.1016/j.cont.2024.101239>

12 - Urodynamic parameters in women with urinary symptoms and previous diagnosis of breast cancer treated with hormone therapy

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Introduction and aim of the study: Breast cancer (BC) can be estrogen receptor positive, leading to treatment with hormone therapy (HT) with tamoxifen or aromatase inhibitor, both reducing levels and/or effect of circulating estrogens.

Estrogens influence the bladder function, since estrogen receptors have been identified in the smooth muscle of the bladder and urethra, in the urothelial mucosa, in bladder nerves, and in central nervous system.

In the early 2000s, epidemiological and animal model studies correlated estrogen deficiency with storage symptom. This study aimed to describe urodynamic findings in a population of women previously undergoing HT for BC.

Materials & methods: This is a unicentric retrospective study including 45 patients, with urinary symptoms and previous diagnosis of BC treated with HT, who underwent urodynamic examination at our hospital from January 2017 to August 2023. The invasive urodynamic study was performed by an expert urologist using a standardized protocol. To study correlations between the variables we used linear regression models.

Results: Median age at urodynamic examination was 68 years.

The anti-hormonal drug was Tamoxifen citrate for 33 patients, Letrozole for four patients, Anastrozole for four patients, Triptorelin for two patients, combination therapy for two patients.

Median duration of therapy was sixty months. For twenty patients therapy was still ongoing.

29 women reported urinary frequency, with a median interval between two consecutive micturitions of 90 min, 33 women reported urgency, 26 women reported nocturia, 15 women reported urinary incontinence.

During the filling phase median First Desire (FS) was 97 ml, with 23 patients (51%) with early FS, median Normal Desire (ND) was 171 ml, with 21 patients (47%) having early ND, median Strong Desire (SD) was 309 ml, with 28 patients (62%) with early SD. Overall, 26 patients (58%) presented early bladder sensitivity.

The median cystometric capacity (CC) was 345 cc, with 23 patients (51%) with a reduction of CC.

Eight patients (18%) had detrusor hyperactivity.

No correlation was found between bladder hypersensitivity and drug used, months of duration of HT, months elapsed since the end of HT.

Interpretation of results: This study shows that this patient population presents bladder hypersensitivity and reduced cystometric capacity. This may explain the storage symptoms.

Conclusions: This is a descriptive analysis of the urodynamic findings in this population. Further studies are needed, such as case-control studies comparing this population's data with those from the general population. Furthermore, it would be interesting to conduct studies to identify predictors of the development of storage symptoms following HT for BC.

Continence 10S (2024) 101240

doi: <https://doi.org/10.1016/j.cont.2024.101240>

13 - A case series of robot-assisted vesico-vaginal fistula repair from a tertiary referral center

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Introduction and aim of the study: Vesico-vaginal fistula (VVF) is a rare event in Western countries which is mainly consequent to iatrogenic injuries. When conservative management fails, surgical repair is needed, although timing and surgical approach (open or minimally-invasive) are still controversial. Herein, we aimed to report the diagnostic workup and management of clinical case scenarios of VVF.

Materials and methods: From 2015 to 2023, 12 patients came to our observation with diagnosis of VVF. Pre-operative cystoscopy was performed in patients who had fistula next to the ureteral ostium for either evaluating the fistula and placing a prophylactic ureteral stent. All patients were scheduled for robot-assisted repair. Briefly, a longitudinal cystotomy and dissection of the posterior bladder from the anterior vaginal wall were performed, and the fistula tract excised. The vaginal incision was sutured horizontally. In 8 patients, omental flap was interposed, while in 4 an adipose tissue patch was preferred. Cystorrhaphy was performed with a double-layer technique.

Results: 11 out of 12 VVF were developed after previous gynaecological surgery, while 1/12 after urological surgical procedure. The median operative time was 147 min [interquartile range (IQR) (70–177)]. Intraoperative blood loss was negligible. Ureteral stents, when pre-placed, were removed at 4-weeks after surgery. Catheter was removed within 4 weeks (mean catheterization time 15) (IQR 11–27) after cystography was negative for leakages. Two patients reported complications within 30 days from surgery, namely one ileus (Clavien I), and one fever (Clavien II). Pathology reports were negative for malignancies in all cases. No recurrences were reported during the follow-up.

Interpretation of results: In our experience, robotic approach for the management of VVF demonstrated to be a reliable option. In our hands, it provided the advantages of minimally-invasive approaches paired to a low morbidity profile. Compared to a transvaginal approach, robotic surgery allowed to manage more complex cases while keeping the success rate high.

Conclusions: Our robot-assisted VVF repair technique seems to be feasible, safe, and effective (see Table 1).

Table 1

Mean age (y)	59
Urological surgery (%)	16%
Gynaecological surgery (%)	83%
Fistula site (%)	
– posterior bladder wall	83%
– bladder dome	16%
Mean operating time (min)	134
Surgical technique (%)	
– Omental flap	67%
– Adipose tissue patch	33%

(continued on next page)

Table 1 (continued).

Complications (%)	17%
Mean catheterization time (days)	16.5
Mean follow-up (months)	12
Recurrence (%)	0

Continence 10S (2024) 101241

doi: <https://doi.org/10.1016/j.cont.2024.101241>

14 - Analysis of variables linked to premature ejaculation: Logistical regression on a large cohort of patients

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Introduction and aim of the study: Premature ejaculation (PE) is a widespread sexual problem that impacts a large number of men globally. PE is defined as either a clinically significant and bothersome reduction in latency time, often to 3 min or less, or as an ejaculation that always or nearly always occurs prior to or within 1 min of vaginal penetration, according to the EAU guidelines. PE can be caused by a number of causes, including physiological, psychological, and relationship aspects. These variables will be examined in this study, which is based on the largest sub-cohort of male patients—to the best of our knowledge—who answered questions about their sexual behaviours and dysfunction. The purpose of the questionnaires is to better understand and treat PE.

Materials & methods: A questionnaire on demographics, mental and neurological disorders, sexual behaviours and traumas, length of ejaculatory latency, and perception of early or delayed ejaculation was given to 1300 males. The condition of premature ejaculation was correlated with lifestyle characteristics, psychological dysfunction, abnormal sexual habits or trauma by a multivariate logistic regression.

Results and interpretation of results: In a multivariate logistic regression analysis, odds ratios were 1.00, 0.76, and 0.88 for the variables “age”, “substance abuse”, and “frequency of porn use”, respectively. This suggests that age is not a significant factor; rather, drug misuse and pornography may have an adverse effect, albeit the difference is not statistically significant.

A higher frequency of masturbation, penetration, and a strong erection are linked to a statistically significant and adverse influence on PE, according to odds ratios for “masturbation frequency”, “penetrating frequency”, and “erection”, which were 0.76, 0.75, and 0.73.

Odds ratio for “PE masturbation” was 6.74, indicating a statistically significant and positive correlation between experiencing PE during masturbation and during sexual intercourses.

Odds ratio for “alcohol use” was 1.60, indicating a statistically significant and favourable relationship between alcohol use and PE.

“Sex desire” odds ratio of 1.02, and $P = 0.903$ shows that there is no significant relationship between sexual desire and PE.

Conclusions: To summarize, findings indicate that there is a strong correlation between PE and alcohol use, frequency of penetration, frequency of masturbation, and erectile function. While alcohol consumption has a beneficial influence on PE, frequency of masturbation and penetration has a negative effect. PE has a negative correlation with good erectile function. In this model, PE does not seem to be significantly impacted by age, substance misuse, or regular exposure to pornography.

Continence 10S (2024) 101242

doi: <https://doi.org/10.1016/j.cont.2024.101242>

15 - Female point of view on premature and delayed ejaculation: Latency time, psychological perception, and sexual satisfaction in a large cohort of study

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Introduction and aim of the study: Female sexuality can be significantly impacted by both delayed and premature ejaculation. While the effect of these dysfunction on men psychology has been investigated, female point of view often tends to be little considered. Female perception of the issue could be different from male counterpart, as well as the impact on sexual life in terms of satisfaction.

We present our results on woman's perspective on ejaculation latency from a large cohort survey.

Materials & methods: 1197 women were subjected to an online questionnaire provided through a social network page, concerning demographic data, sexual habits, duration of partner's ejaculatory latency, perception of premature or delayed ejaculation and overall sexual satisfaction. Descriptive statistics were used to analyze the questionnaire replies.

Results: Median age of participants was 22 (19–35) years.

Average (SD) perceived ejaculatory latency time during sexual intercourse was 20 (14) minutes.

626/1197 (52%) women declared they never perceived delayed ejaculation, while 25/1197 (2%) had always this impression.

Partner's ejaculation was always considered premature by 41/1197 (3%) women. Instead, 730/1197 (61%) never perceived that.

60/1197 (5%) women declared an ejaculatory latency time under 3 min in their last 5 sexual intercourses.

Dissatisfaction regarding ejaculatory latency time was felt by 28/1197 (2%) women, and full satisfaction by 358/1197 (30%).

As for overall satisfaction, 521/1197 (44%) women declared themselves fulfilled by their sexual life.

Interpretation of results and conclusions: There is relatively little evidence of young women's discontent with ejaculation latency since only a small percentage of them see delayed or premature ejaculation as a persistent issue, and most of them never experience it. However, less than half of the participants

declare complete fulfillment by their sexual life overall, highlighting the impact of personal, relational, and sexual elements beyond ejaculatory latency on sexual satisfaction.

Continence 10S (2024) 101243

doi: <https://doi.org/10.1016/j.cont.2024.101243>

16 - Decision satisfaction and regret in patients undergoing ATOMS[®] adjustable sling implantation for urinary stress incontinence

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Introduction and aim of the study: Aim of this study was to assess treatment satisfaction and treatment regret in patients undergone ATOMS[®] adjustable sling implantation for urinary stress incontinence (IUS).

Materials and methods: We performed an analysis of retrospectively collected data of consecutive patients undergoing IUS surgery. All patients underwent detailed clinical history and physical examination, pre-operative, peri-operative and post-operative characteristics were recorded. Decision regret was evaluated with validated questionnaire. Logistic regression analysis was used to evaluate predictors of regret and satisfaction after ATOMS[®] implantation.

Results: Overall, 134 patients were enrolled with a median age of 75 years old. Baseline mean pads test was 425 gr and baseline mean number of pads was 4. All patients underwent ATOMS[®] adjustable sling implantation for IUS between 2014 and 2021. After 12 months, mean pads test was 82 gr and mean number of pads was 1,2. Median satisfaction score was 2 (2/3) while median regret score 11 (8/11). On logistic regression analysis, pads test (OR = 0,45; $p < 0,05$) and post-operative number of pads (OR = 0,33; $p < 0,05$) were independent predictors of satisfaction. On logistic regression analysis, complications were the only independent predictor of decision regret (OR = 3,44; $p < 0,05$) (Table 1).

Interpretation of results: Pads test and post-operative number of pads were independent predictors of satisfaction while complications were the only independent predictor of decision regret.

Conclusions: In patients undergoing surgery for stress urinary incontinence treatment satisfaction depends on continence status. The only predictive factor of regret is the presence of complications.

Table 1

Binary logistic regression analysis for the risk of satisfaction and decision regret.

Satisfaction Analysis			Regret Analysis		
Variable	OR (95%) CI	p	Variable	OR (95%) CI	p
Age	0,93 (0,91–1,03)	0,10	Age	0,94 (0,81–1,31)	0,18
Pads test	0,45 (0,41–0,67)	0,01	Pads test	1,33 (0,89–1,38)	0,27
Post-operative number of pads	0,33 (0,17–0,41)	0,01	Post-operative number of pads	1,57 (0,77–2,53)	0,45
Complications	1,02 (0,78–2,56)	0,35	Complications	3,44 (1,89–5,78)	0,01

Continence 10S (2024) 101244

doi: <https://doi.org/10.1016/j.cont.2024.101244>

17 - Quality of information and appropriateness of ChatGPT outputs for neuro-urology

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Introduction and aim of the study: Neuro-urological symptoms can cause a variety of long-term complications, making early diagnosis and treatment essential in preventing irreversible changes within the lower and upper urinary tract.

ChatGPT, a natural language processing (NLP) tool created by OpenAI, can potentially be used as a valid source for obtaining information related to neuro-urological symptoms and their management and follow-up. This study aims to analyze the quality and appropriateness of ChatGPT’s responses to inquiries related to neuro-urology compared to those of the European Urology Association’s (EAU) 2023 Neuro-Urology Guidelines.

Materials and methods: Overall, 44 questions were prepared according to the recommendations gathered in the Neuro-Urology section of the EAU 2023 Guideline. All questions were systematically presented to ChatGPT’s August 3 Version, and two expert urologists independently assessed and assigned scores

ranging from 1 to 4 to each response (1: completely correct, 2: correct but inadequate, 3: a mix of correct and misleading information, and 4: completely incorrect). Sub-analyses per section involved and in relation to the strength level of the recommendations were performed.

Results: Of the 44 answers, 39 (88.64%) were evaluated as grade 1, and 3 (6.82%) as grade 2. None were evaluated as grade 3 while only 2 (4.55%) questions were answered completely wrong.

Answers in the diagnosis section were evaluated as grade 1 (8/10, 80.0%) or grade 2 (2/10, 20.0%). In the urodynamic testing section, all answers were evaluated as grade 1 (4/4, 100%). Only 1/9 (11.11%) answers related to medical treatment/catheterization were evaluated as grade 4 while 8/9 (88.88%) as grade 1. All answers on surgical treatment (5/5, 100%), UTIs treatment (4/4, 100%) and male sexuality (8/8, 100%) were evaluated as grade 1. On female sexuality, one answer (1/2, 50.0%) was evaluated as grade 4, while the other (1/2, 50.0%) was graded as 1. In the follow-up section, 3 answers (3/4, 75.0%) were evaluated as grade 1 while to only 1 (1/4, 25.0%) was given a grade 2.

Interpretation of results: ChatGPT has provided satisfactory responses to questions related to diagnosis, urodynamic testing, surgical treatment, UTIs treatment, male sexuality, and follow-up of neuro-urological dysfunction. Less satisfactory answers were provided in relation to medical treatment/catheterization and female sexuality.

Conclusions: Despite its limitations, it is foreseeable that this continuously evolving platform could be a useful support in relation to neuro-urological symptoms early diagnosis and management.

Continence 10S (2024) 101245

doi: <https://doi.org/10.1016/j.cont.2024.101245>

18 - Urodynamic changes in intracorporeal robotic Y shaped ileal neobladder 12 and 30 months postoperatively

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Introduction and aim of the study: Robot-assisted radical cystectomy (RARC) with intracorporeal neobladder is becoming more common worldwide. The choice to perform this technique is sustained by a less invasive approach and a better quality of life than other types of urinary diversion. The Y-shaped orthotopic neobladder has been well-documented as an option for patients undergoing RARC.

This study evaluated the urodynamic data of patients undergoing RARC with intracorporeal Y-shaped neobladder through a urodynamic study (UDS) performed 12 and 30 months after surgery.

Materials and methods: The study was conducted on patients who underwent RARC with the construction of an intracorporeal orthotopic Y-shaped neobladder to treat muscle-invasive bladder cancer. Patients receiving other urinary diversions and/or affected by neurogenic dysfunction were excluded from the study. All patients underwent uroflowmetry (URF), UDS, and physical examination 12 and 30 months after surgery. Furthermore, we collected data on BMI, need for an indwelling catheter, self-intermittent catheterization (SIC), number of catheters used, daytime urinary incontinence (DT-UI), number of used pads, nocturnal UI (N-UI), number of voluntary micturition at 12 and 30 months follow-up.

Results: The study enrolled 21 patients who underwent RARC from January 2020 to May 2021: 15 male (71%) and 6 female (29%). At the 12-month follow-up, two patients needed indwelling catheters, 4 needed SIC (mean: 3.6 catheters/day), 3 reported DT-UI (mean 1.2 pads/day), and 2 N-UI. At 30 months, only 1 patient needed an indwelling catheter, 3 needed SIC (mean: 3.8 catheters/day), 4 reported UI (2 DT-UI, 2 N-UI). Seventeen patients were able to perform URF at 12 months, and 20 patients at 30 months. PVR was lower at 30 months (33.4 mL vs 20.6 mL $p < 0.05$).

UDS was performed according to the ICS guidelines at the 12- and 30-month post-op. UDS data improved at the 30-month examination from the 12-month UDS. Statistically significant differences were found in cystometric bladder capacity (mean: 399 mL vs. 463 mL, $p < 0.05$), abdominal leak point pressure (mean: 82.2 cmH₂O vs. 95.9 cmH₂O, $p < 0.05$), and PVR (mean: 80.5 mL vs. 52.1 mL, $p < 0.05$). Furthermore, no neobladder spasms were documented at the 30-month UDS.

Interpretation of results and conclusions: The study results showed that RARC with intracorporeal orthotopic Y-shaped neobladder might be feasible for patients undergoing RARC eligible for orthotopic urinary diversion. UDS shows progressive functional improvements over time, most importantly in total bladder capacity and PVR. However, the results might be correlated with the UDS of other common orthotopic intracorporeal-urinary diversions performed during RARC. For this reason, further studies are needed.

Continence 10S (2024) 101246

doi: <https://doi.org/10.1016/j.cont.2024.101246>

19 - Preoperative urodynamics findings hardly predict functional outcomes of male sling for urinary incontinence after prostate surgery

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Introduction and aim of the study: Urinary incontinence is a prevalent and distressing condition affecting a significant proportion of the male population, particularly after surgery. This study aimed to evaluate the presence of a correlation between preoperative urodynamics findings and clinical outcomes after 6 months from the procedure.

Materials and methods: The study relied on a single institution prospectively maintained dataset of male patients treated with suburethral sling AdVanceXP for urinary incontinence after prostate surgery. Patients with a follow up less than 6 months were excluded from the study. Final population consisted of 52 patients. Medians with interquartile ranges (IQR) were used to report continuous variables, frequencies, and proportions for categorical variables. Finally, univariate

logistic regressions were used to explore the correlation between urodynamics findings, namely first desire (FD), maximal detrusorial pressure (PdetMax), maximal cystometric capacity (MCC), bladder contractility index (BCI), bladder obstruction index (BOI), maximal urethral closing pressure (MUCP), post residual volume (PVR), and social continence after the procedure. All statistical analyses were performed using R studio graphical interface for R v.4.0.1. All tests were two-sided, with a level of significance set at $p < 0.05$.

Results: Median patient age was 73 years (69–76). Overall, 45 (87%) patients had undergone radical prostatectomy for prostate cancer and 7 (13%) had undergone surgery for benign prostatic hyperplasia (BPH) related lower urinary tract symptoms. Median time between surgery and sling were 36 months (24–51). During this time, 22 (42%) patients were treated with external beam radiation therapy for biochemical recurrence. Overall, 40 (77%) patients underwent pelvic floor muscle training. 41 patients (79.2%) used more than 3 pads/day before male sling while one patient (1.9%) continence status was not evaluable due to indwelling urinary catheter. Patients Preoperative urodynamics findings are reported in Table 1. After 6 months of follow-up, 34 patients (68%) were socially continent, while 18 patients (34%) used ≥ 3 Pad/day. At univariable logistic regression no correlation was found between FD, PdetMax, MCC, BCI, BOI, PVR and social continence after procedure (all $p > 0.05$). MUCP was significantly associated with achievement of social continence at 6 months after procedure (OR 3.5, CI 1.2-17, $p = 0.04$).

Interpretation of results: Higher MUCP after prostate surgery (≥ 40 cmH₂O) could be associated with better functional outcomes due to a more accurate preservation of the anatomical structures.

Conclusions: Maximal urethral closing pressure >40 cmH₂O is the only urodynamics preoperative parameter associated with social continence achievement after male sling for urinary incontinence and could be investigated as a predictive feature to select patients for sling surgery. Further studies with larger patients' series are needed.

Variable	N = 52
Age, Median (IQR)	73 (69-76)
BMI, Median (IQR)	27 (25-29)
Surgery, n (%)	
Open Radical Prostatectomy	7 (13)
Laparoscopic Radical Prostatectomy	9 (17)
Robotic Radical Prostatectomy	29 (56)
Surgery for BPH	7 (13)
Time between surgeries, Median (IQR)	36 (24-51)
External beam radiation Therapy, n (%)	
Yes	22 (42)
No	30 (58)
Preoperative pad usage, n (%)	
1-2	11 (20.8)
≥ 3	40 (77.3)
Indwelling urinary catheter	1 (1.9)
Pelvic Floor Muscle Training, n (%)	
Yes	40 (77)
No	12 (23)
Qmax, Median (IQR)	15 (11-22)
FD, Median (IQR)	118 (79-193)
PdetMAX, Median (IQR)	13 (3-21)
MCC, Median (IQR)	279 (195-352)
PdetQmax, Median (IQR)	14 (8-22)
BCI, Median (IQR)	73 (51-109)
BOI, Median (IQR)	0 (0-7)
MUCP, Median (IQR)	41 (37-48)
PVR, Median (IQR)	0 (0-61)

20 - ChatGPT's scientific accuracy on Sexual and Reproductive Health according to EAU Guidelines

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Introduction and aim of the study: Artificial intelligence (AI) is the science of making machines that can think like humans. ChatGPT, which stands for Chat Generative Pre-trained Transformer, is a chatbot based on AI and automatic learning, specialized in conversation with human users. Many studies have investigated the role of this tool in assisting medical professionals in various tasks, including research, diagnosis, and medical education. The aim of our study was to assess the consistency and accuracy of the information provided by ChatGPT 4.0 when queried on EAU's 2023 Sexual and Reproductive Health guideline recommendations.

Materials and methods: The EAU Guidelines on Sexual and Reproductive Health published in 2023 was assessed. 9 chapters on various Andrological diseases' diagnosis and treatment were considered. ChatGPT 4.0 version was questioned on each recommendation present in the guideline. The consistency of the answer was defined by the absence of incorrect statements in the AI's generated sentence and the accuracy was evaluated by an expert urologist as the level of details provided, graded on a 5-point Likert scale.

Results: 35 questions were made on 13 topics: 12 questions were on diagnostic work-up and 23 on therapeutic options. Overall, Chat GPT was correct in 30 over 35 questions (85%). The incorrect answers were given when questioned on penile curvature and penile shortness. The most accurate answers were on priapism and diagnostic evaluation of erectile dysfunction. The mean accuracy rate was 2.7 (IQR: 1,8/3,3).

Interpretation of results: Though ChatGPT seems to be able to provide valuable data and information, it is important to highlight that it is always recommended to discuss with a clinician the information provided.

Conclusions: ChatGPT is an interactive tool, capable of providing updated medical information online, offering a valuable source of medical data to patients and clinicians. Nevertheless, it cannot replace the clinician's role in the decision-making process.

Question	Coherence	Accuracy
Diagnostic evaluation of late onset hypogonadism (LOH)	1	3
Testosterone therapy outcome in LOH	1	4
Choice of treatment for LOH	1	3
Risk factors evaluation in testosterone treatment	1	2
Diagnostic evaluation of erectile dysfunction (ED)	1	5
Treatment of ED	1	4
Table: Performance of ChatGPT in some of the domains.		

Continence 10S (2024) 101248

doi: <https://doi.org/10.1016/j.cont.2024.101248>

21 - Urodynamic parameters in asymptomatic patients with ileal orthotopic neobladder: A systematic review and meta-analysis

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Introduction and aim of the study: The orthotopic neobladder is the type of urinary diversion (UD) that most closely resembles the original bladder. However, in literature the urodynamic aspects are scarcely analysed. Aim of this study is to provide the first systematic review on the urodynamic (UDS) outcomes of the ileal orthotopic neobladders (ONB).

Materials and methods: A PubMed, Embase and Cochrane CENTRAL search for peer-reviewed studies on ONB published between January 2001–December 2022 was performed according to the Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) statement using the following search terms "neobladder" OR "orthotopic reconstruction" OR "bladder substitution" OR "orthotopic urinary diversion" AND "urodynamics". All included studies were on patients having UDS for routine ONB function; no study included ONB patients being evaluated for abnormal voiding. Studies with a dropout $\geq 50\%$ were not considered in the analyses.

Results: 59 manuscripts were eligible for inclusion. The majority of articles included were retrospective, with only 28.8% prospective trials. Follow-up ranges from 5 months to 179.2 months (mean value 42.7 months). Mean age were 61.2 years. The range of harvested ileum was 25–70 cm. Number of patients recurring to CIC is reported in 3 (5.1%) studies. In our review, 52.5% of the included papers had performed UDS less than one year after surgery, with 50% of them repeating UDS at 12 months.

31/59 were compliant with the ICS Good Urodynamics Practices. 11 studies reported the free uroflowmetry outcomes as performed before UDS.13 (22.0%) studies documented absence of persistent peristaltic contractions during the filling phase. The most reported parameters (39 studies, 66.1%) were MCC and compliance. Concerning the voiding phase Qmax, PVR and ONB pressure at MCC were more commonly reported (24 studies, 40.7%). The pooled mean was 406.2 mL (95%CI:378.9-433.4 mL) for maximal (entero)cystometric capacity (MCC) and 21.4cmH2O (95%CI:17.5-25.4cmH2O) for Pressure ONB at MCC. Postvoid-residual (PVR) ranged between 4.9–101.6 mL.

Interpretation of result: In all papers the UDS outcomes are globally presented without being subdivided per sex. The absence of good urodynamic practices for ONB and the different time-points of UDS evaluation for each paper causes a vast heterogeneity of data. Furthermore, the same parameters applied to an intact bladder are used for orthotopic ONB that has innate differences from original bladder in terms of sensory and motor functions. Despite data heterogeneity, the ileal ONB seem to guarantee UDS parameters that resemble those of the native bladder.

Conclusions: Adequately designed prospective trials adopting standardised postoperative terminology and methods of outcome evaluation as well as of conduction of the UDS in the setting of ONB are necessary to obtain homogeneous follow-up data and to establish UDS guidelines for this setting.

Continence 10S (2024) 101249

doi: <https://doi.org/10.1016/j.cont.2024.101249>

22 - AMS800 artificial urinary sphincter: A novel modified easier technique

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Introduction: The artificial urinary sphincter (AUS), specifically the AMS 800™ (Boston Scientific) is considered the gold standard for the treatment of male stress urinary incontinence (SUI). AUS placement is an invasive procedure that can result in adverse events, such as intraoperative urethral lesions, postoperative infections, postoperative urethral erosions, mechanical failure and hematomas. AMS 800™ implantation can be done either with a transscrotal approach or with LdHJH OHOèèPO a two-incision approach. We describe a novel implantation technique with the aim of minimizing its impact and making the procedure safer and faster.

Material and methods: We performed a retrospective, double-center, single-arm study. All patients received an intravenous antibiotic prophylaxis with ceftriaxone and amikacin before the incision. All surgeries were performed in the lithotomy position and under spinal anaesthesia. We performed a first perineal median incision for cuff placement and a second minimal incision at the root of the scrotum for the placement of the other components. The external inguinal ring is identified and the floor of the inguinal canal is opened and penetrated using scissors or a fingertip in order to positioning the pressure regulating balloon (PRB) in the retropubic space. Through the same incision the control pump is positioned into the anterior scrotum. All components' connections are made at the level of scrotum incision to avoid blind passages. At the end of the surgery a 14 Ch Foley catheter was placed. Complication rate, efficacy and degree of satisfaction were analyzed.

Results: 55 patients were treated with this technique between 2017 and 2022. The average age was 71.5 (\pm 5.1). All patients had previously undergone robot-assisted radical prostatectomy and 10 (18%) of these also underwent adjuvant radiotherapy. 4 patients had previously undergone mid-urethral sling placement and 3 had proACT sphincter placement.

Mean preoperative daily number of pads was 4.3 (\pm 2.1) and median preoperative pad test and IPSS score were 450 g (IQR 300–900) and 5 (IQR 4–5), respectively. The average operating time was 35 min and the average hospital stay was 2 days (IQR 2–4).

Concerning minor and major intra and postoperative complications we did not report any cases of wound infection, hematomas, fever, urethral lesions, hemorrhages, bladder and intestinal perforations or need for surgical revision (for any reasons). We did not observe any cases of post-operative scrotal pain. At 12 months follow-up 94% of patients were social continent. Median postoperative pad test and IPSS score were 15 (0–30) g and 2 (IQR 1–3).

Conclusion: Our technique is safe, effective and well tolerated. This approach allows for easier component positioning, avoiding blind tunneling to create connections and reducing the risk of hematomas and scrotal pain. The main limitation of this approach is that it cannot be proposed in patients who have undergone bilateral inguinal hernioplasty.

Continence 10S (2024) 101250

doi: <https://doi.org/10.1016/j.cont.2024.101250>

23 - One-year outcomes after water vapor thermal therapy in frail patients with urinary retention and catheter dependency

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Introduction and aim of the study: The aim of this study was to evaluate the efficacy and safety of Rezum therapy in frail patients with refractory acute urinary retention secondary to benign prostatic hyperplasia (BPH).

Materials and methods: This is a single-center prospective study. Consecutive frail patients with indwelling urinary catheter undergoing Rezum treatment from June 2022 to June 2023 were recruited from our institution. Eligible patients were unfit or at high risk of complications for conventional BPH surgery. The primary endpoint was successful catheter withdrawal and continuing catheter independency at 3, 6 and 12-months after treatment.

Results: 50 patients (mean age, 75.78 \pm 9.31) were enrolled for analysis. Mean prostate volume was 45.2 \pm 75.1 and 83% of patients had a median lobe. Charlson comorbidity index and duration of preoperative catheterization were 1 \pm 7 and 3.5 \pm 6.0 months, respectively. ASA classification was as followed: II: 5%, III: 85%, and IV: 10%. All procedures were performed successfully in an ambulatory setting. Perioperative complications were infrequent and minor (Clavien–Dindo Grade 1–2) and included haematuria in 2% and urinary tract infection in 3% of all cases. After a median postoperative catheterization time

of 21 days (IQR 11–32), all patients voided spontaneous. During follow up period, 1 patients (%) required further surgery for symptomatic BPH. In terms of pharmacological management, 50/50 patients (100%) had a BPH medication pre-Rezūm™; this decreased to 25/50 patients (50%) post-Rezūm™ ($p < 0.001$).

Interpretation of results: In this single-institution series, we report our experience with the Rezūm™ therapy to remove the indwelling urinary catheter in a cohort of frail, multimorbid patients. Our results are noteworthy as the treatment allowed postoperative catheter removal in all treated patients and the efficacy appears to be maintained over time.

Conclusions: In this single-institution, prospective and observational study, water vapor thermal therapy was found to be effective and safe in restoring successful spontaneous voiding in a cohort of elderly and frail patients.

Continence 10S (2024) 101251

doi: <https://doi.org/10.1016/j.cont.2024.101251>

24 - Prostate shape and intravesical prostatic protrusion assessed by Magnetic Resonance Imaging are related to urinary symptoms

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Introduction and aim of the study: Magnetic Resonance Imaging (MRI) of the prostate has gained popularity in the field of prostate cancer management. Little is known about the use of MRI in the management of lower urinary tract symptoms (LUTS). Aim of the study was to assess whether prostate features on MRI can be related to LUTS.

Materials and methods: Patients who underwent MRI for clinical suspicion of PCA were evaluated for LUTS through International Prostatic Symptoms Score (IPSS) and uroflowmetry.

Prostate Volume (PV), Detrusor Wall Thickness (DWT) and Intravesical Prostatic Protrusion (IPP) were measured respectively by using conventional prolate ellipsoid formula, as the mean of thickness of the anterior–posterior and dome bladder walls, as the vertical distance from the tip of the protruding prostate to the base of the bladder. Prostate shape was classified in accordance to previously reported classification of Randal as follows: type 0, an equal to or less than 25 cm³ prostate showing little or no zonal enlargement; type 1, bilateral TZ enlargement; type 2, retrourethral enlargement; type 3, bilateral TZ and retrourethral enlargement; type 4, solitary or multiple pedunculated enlargement; type 5, pedunculated with bilateral TZ and/or retrourethral enlargement; type 6, subtrigonal or ectopic enlargement; and type 7, other combinations of enlargements Pearson correlation coefficient was computed to test the association between MRI features and IPSS and Qmax (pearson 0.65 $p = 0.001$).

Results: 38 mpMRI were reviewed by urology-dedicated radiologist. Mean age of patients was 61.9 ± 25.2 years. Mean DWT, prostate volume, IPP, IPSS, and Qmax were respectively 3.8 ± 2.05 mm, 64.16 ± 31.6 mm³, 4.5 ± 0.5 mm, 20.13 ± 7.08 points, 15.09 ± 5.35 ml/s.

Regarding prostate shape, Randall type 0, type 1, type 2, type 3, type 4, type 5 were found respectively in 3(7.9%), 6(15.8%), 5(13.2%), 12(31.6%), 4(10.5%), 8(21.1%) patients.

Interesting, prostate volume, IPP, and prostate shape were significantly correlated to IPSS while only IPP and prostate shape were correlated to Qmax.

Interpretation of results: Our preliminary data suggest that MRI prostate features may be used as tool to assess the main outcomes related to LUTS, i.e. IPSS and Qmax.

Conclusions: Further studies are still required to introduce MRI in the field of LUTS-BPH.

Continence 10S (2024) 101252

doi: <https://doi.org/10.1016/j.cont.2024.101252>

25 - Influence of number of injections during REZUM procedure for bladder outlet obstruction on pain and lower urinary tract symptoms

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Introduction and aim of the study: To assess the impact of injections number during REZUM for bladder outlet obstruction (BOO) on pain/discomfort, lower urinary tract symptoms (LUTS), overactive bladder syndrome (OAB).

Materials and methods: Males undergoing REZUM for BOO were enrolled (Jan-Sep 2023) in this prospective study. Preop and at 1-and 3-mos f-up data were: symptomatic (OAB Screener, IPSS, IIEF5) and quality of life (QoL) questionnaires, VAS score for pain/discomfort, uroflowmetry (UF), post-void residual urine (PVR). F-up was limited to 3-mos as most of these types of adverse events are usually observed within this period.

Results: Data were completed on 47 males: mean age 71 y.o. (sd 9.4), median prostate volume 40cc (40–54), median PSA 1.9ng/ml (1–2.4), mean prostatic urethra length 2.9 cm (sd 0.8), mean injections number 7.5 (sd 2.6), third lobe treated 9 (19.2%). Table 1 reports pts outcomes. Qmax and PVR improved at 1-mos and significantly at 3-mos. Pain/discomfort were significantly greater at 1-mos, but decreased and were not statistically higher at 3-mos. LUTS (IPSS) improved at 1-mos and were significantly lowered at 3-mos. OAB symptoms were only slightly higher at 1-mos, but comparable to the baseline at 3-mos. Sexual function (SF) did not change. No significant correlation was found between injection number and these parameters (LUTS, OAB, pain/discomfort, SF) at linear regression and Spearman coefficient ($p > 0.05$). Treatment of third lobe and prostatic volume did not negatively impact on these parameters ($p > 0.05$).

Interpretation of results: This study showed that number of injections were irrelevant on pain/discomfort, LUTS, OAB after REZUM. This could be due to the relation between number of injections and prostatic volume, so a greater number of injections in a higher prostatic volume does not seem to cause a significant increase in these adverse events. At 1-mos follow-up a higher pain/discomfort and slightly greater rate of OAB has to be expected, but these symptoms are only transient and usually decrease at 3-mos. This finding is relevant especially for better preoperative counseling.

Conclusions: Pain/discomfort, LUTS and OAB did not correlate with the number of injections during REZUM.

Table 1
Patient outcomes.

	Pre-treatment baseline	Post-treatment 1 month	p-value pre VS 1 month	Post-treatment 3 months	p-value pre VS 3 months
Qmax Median (IQR)	9 (8 – 13)	11.5 (7.5 – 14)	0.411	13 (11 – 15)	<0.05*
PVR Median (IQR)	150 (30 – 270)	45 (0 – 94)	<0.05*	30 (10 – 60)	<0.05*
IPSS Mean (sd)	15.1 (6.9)	13.5 (7.8)	0.082	10 (6.4)	<0.001*
QoL Mean (sd)	3.9 (1.3)	2.8 (1.7)	<0.001*	2.3 (1.4)	<0.001*
IIEF5 Mean (sd)	12.7 (8.6)	11.7 (9.2)	0.755	15.4 (8.9)	0.502
OAB Mean (sd)	22.3 (14.7)	32.4 (12.1)	0.428	26.9 (11.4)	0.225
VAS Median (IQR)	0 (0 – 1)	1 (0 – 2)	<0.05*	0 (0 – 1)	0.166

26 - Urodynamic effect of prostatic urethral lift

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Introduction and aim of the study: Aim of our study is to evaluate the possible urodynamic effect role of prostatic urethral lift (PUL) in patients with lower urinary tract symptoms due to benign prostatic hyperplasia.

Materials and methods: A consecutive series of patients undergoing PUL placement were consecutively enrolled in two centers. Inclusion criteria included: ≥50 years of age, benign prostatic obstruction (BPO), international prostate symptom score (IPSS) ≥ 13, prostate volume ≤ 60 mL, and no middle prostate lobe. All patients were evaluated with detailed clinical history, validated questionnaire, flexible cystoscopy and pressure flow studies (PFS) at baseline. PFS were performed at 3 months to evaluate the urodynamic effect of PUL.

Results: Overall, 20 patients with a median age of 66 were enrolled. At baseline median PV was 43 (33/51) cc, median IPSS was 16 (14/18) and median Shaffer score was III (II/IV). In terms of sexual function median IIEF was 22 (20/24) and median MSHQ was 13 (12/15). All patients successfully completed the procedure, and no major complications were recorded. 7/20 patients needed catheterization perioperatively. At three months statistically significant improvements in terms for Qmax (13.9 vs 10.4; *p* < 0.05) and IPSS (16 vs 8; *p* < 0.05) were recorded and sexual function was maintained. On urodynamic study at three months there was a statistically significant improvement in PdetQmax (55 vs 80; *p* < 0.05) and Qmax values (12 vs 9.5; *p* < 0.05). Finally, Shaffer class improved from a median III to a median of II. More specifically; 14/18 presented an improvement in Shaffer class.

Interpretation of results: PUL showed to improve Qmax and IPSS in patients with LUTS due to BPH, while maintaining sexual function.
Conclusions: PUL represents an effective treatment in patients with LUTS due to BPH and improves bladder outlet obstruction. As well sexual function is maintained.

Continence 10S (2024) 101254
doi: <https://doi.org/10.1016/j.cont.2024.101254>

27 - Efficacy and patient reported outcomes in patients undergoing BPH surgery with large prostates

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Introduction and aim of the study: The purpose of this study was to evaluate efficacy and patient reported outcomes of patients undergoing surgery for LUTS/BPH with large prostates. Secondary objective was to compare different surgical techniques (TURP vs HoLeP vs RSP vs Aquablation).

Materials and methods: We performed an analysis of prospectively collected data of consecutive patients undergoing LUTS/BPH surgery in 5 primary care Italian urology centers. Patients included underwent TURP, HoLeP, robotic simple prostatectomy (RSP) or Aquablation. All patients with prostate volume <80cc were excluded. Decision regret and satisfaction was evaluated with validated questionnaires. Different techniques were compared in terms of efficacy (Qmax and IPSS) and patient reported outcomes.

Results: Overall, 227 patients were enrolled. 42/227 (19%) underwent TURP, 38/227 (17%) underwent HoLeP, 114/227(50%) underwent robotic simple prostatectomy and 33/227 (15%) Aquablation. Overall, 213/227 (94%) patients reported they made the right choice, 211/227 (93%) patients reported they would do the same choice again and 208/227 (92%) reported the choice was wise. On the other side only 10/227 (4%) regretted their choice and 22/227 (10%) reported harm after the intervention.

Table 1
Regret and Satisfaction in patients based on different techniques.

Variable	TURP	HoLeP	RSP	Aquablation
Right Decision	100%	100%	90%	91%
Regret Choice	0%	0%	6%	9%
Same Choice Again	100%	100%	90%	85%
Harm from Intervention	2%	5%	10%	24%
Wise Choice	100%	97%	88%	85%
Median Qmax improvement	13 (9/16)	16 (12/20)	18 (14/22)	7 (2/17)
Median IPSS improvement	24 (19/30)	24 (21/27)	31(28/33)	13 (10/16)

Interpretation of results: When comparing different techniques, endoscopic techniques presented higher rates of satisfaction and lower rates of regret (Table 1). Overall median Qmax improvement was 16 (11/19) and median IPSS improvement was 24 (28/20). RSP presented the best improvements in terms of Qmax and IPSS when compared to the other techniques.

Conclusions: In patients with large prostates RSP presents the best objective results, however it carries higher risks of poor satisfaction or regret. Endoscopic techniques have excellent results in terms of objective outcomes and patient reported outcomes.

Continence 10S (2024) 101255

doi: <https://doi.org/10.1016/j.cont.2024.101255>

28 - Predictive risk factors associated to de novo LUTS onset after robot assisted radical prostatectomy: A prospective multicenter study

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Introduction and aim of the study: Lower Urinary Tract Symptoms (LUTS) are frequently observed in men above the age of 45, causing a great impact on their quality of life. A significant number of patients undergoing Radical Prostatectomy manifest LUTS such as Storage Symptoms and Urinary Incontinence (UI). Our study aimed to identify the principal predictive factors correlated to the onset of LUTS in surgically treated patients.

Materials and methods: Our prospective study enrolled patients with Prostatic Cancer treated with Robot-Assisted Radical Prostatectomy (RARP), according to the European Guidelines, between January 2021 and May 2023. Exclusion criteria were the presence of pre-operative Detrusor Overactivity, UI and previous treatment with Pelvic Radiotherapy. PSA, smoking habit, and BMI were evaluated pre-operatively and the patients were ultimately divided in 3 groups based on their age. Every subject was investigated with an UroDynamic Study (UDS), which was performed pre-operatively and at the 3rd, 6th and 12th post-operative month.

Results: Of the initial 150 eligible patients that involved pre-operative UDS, we were able to enroll 73 subjects following our exclusion criteria and, in addition, we divided them in three age groups: Group A (16 patients in the 45 to 53 years range), Group B (26 patients in the 54 to 61 range) and Group C (31 patients in the 62 to 69 range). Group A showed Detrusor Overactivity (DO; $p < 0.05$) in 15% of the patients at the 3rd month UDS, 11% at the 6th month and 7% at the 12th month; Group B showed DO ($p < 0.05$) in 20% of the patients at the 3rd month, 17% at the 6th month and 11% at the 12th month; Group C showed DO ($p < 0.05$) in 30% of the patients at the 3rd month, 26% at the 6th month and 20% at the 12th month. In those who developed DO, mean BMI ($p < 0.05$) was 29.0 and 57% were smokers ($p < 0.05$), while in those who didn't develop DO, mean BMI ($p < 0.05$) was 25.0 and 28% were smokers ($p < 0.05$).

Interpretation of results and conclusion: Our study suggests that BMI, age and smoking habit were statistically significant factors directly correlated in the development of DO ($p < 0.05$) in patients who underwent RARP, with its presence decreasing over time, albeit persisting in a significant percentage of patients.

Continence 10S (2024) 101256

doi: <https://doi.org/10.1016/j.cont.2024.101256>

29 - Micturition recovery after HoLEP in patients with long-term indwelling catheter: A single centre experience

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Introduction and aim of the study: Holmium Laser Enucleation of the Prostate (HoLEP) is a well-established treatment for lower urinary tract symptoms due to benign prostatic obstruction (BPO) causing urinary retention and consequent bladder catheterization. In recent years, also because of the pandemic, an increasing number of patients are compelled to maintain an indwelling bladder catheter for long periods before receiving adequate treatment, thus having a possible detrimental effect on detrusor contractility. As recently shown by a systematic review and meta-analysis (Wroklawski et al. 2023), surgical treatment for BPO may be beneficial also in patients with altered bladder contractility. The aim of the study was to evaluate micturition recovery after HoLEP in men with long-term (> 5 months) indwelling bladder catheter at short-term follow-up.

Materials & methods: This was a retrospective, single centre, cohort study. We retrospectively collected data from patients who underwent HoLEP in a single centre by a single experienced surgeon between January 2022 and July 2023. Men were then divided in two cohorts based on the presence of bladder catheter before surgery (group A) or not (group B). After 3 months we evaluated surgery outcomes (maximum flow rate (Qmax), post-void residual (PVR), International Prostate Symptom Score (IPSS) questionnaire). Differences among groups were analysed with unpaired T-test and results were displayed in boxplots.

Results: Patients in group A (indwelling catheter) were 20 and patients in group B were 30. No difference in baseline data were observed; prostate volume and hospital stay were slightly higher in group A. Patients in group A had an indwelling catheter for a mean of 13.7 months. After surgery, all patients obtained a valid micturition recovery in terms of non-significant PVR (< 50 mL) and sufficient Qmax (> 12 mL/s). There was no statistical difference regarding PVR ($p = 0.845$) and IPSS ($p = 0.101$) between the two groups, while Qmax values were lower in group A ($p = 0.009$), although sufficient for a valid micturition.

Interpretation of results: Baseline prostate volume was, as expected, higher for patients with indwelling catheter, reflecting their higher probability of suffering from BPO complications. Surgery outcomes at 3 months follow-up showed that both groups were able to successfully empty their bladder, with non

significant PVR or symptoms, although urinary flow was less valid for group A. Lower Qmax in this group of patients may be due to a transient detrusor hypocontractility.

Conclusions: This retrospective analysis suggests that HoLEP is an effective treatment for valid micturition recovery also for patients with long-term indwelling catheter, with comparable results in terms of PVR and IPSS score, thus confirming the possibility to also treat patients with sub-optimal bladder contractility, with good outcomes. Prospective validation is essential to confirm these results.

Continence 10S (2024) 101257

doi: <https://doi.org/10.1016/j.cont.2024.101257>

30 - Evaluation of the adherence to ERAS protocol and the achievement of the TRIFECTA in patients underwent robot-assisted radical cystectomy with totally intracorporeal reconstruction

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Introduction and aim of the study: ERAS (Enhanced Recovery After Surgery) protocols are perioperative, multimodal and multidisciplinary care pathways to reduce the effects of surgical stress on patients undergoing major abdominal surgery and its popularity is ever-increasing also in the treatment of bladder cancer. Despite this, in everyday clinical practice, adherence to this protocols is not always easy to achieve. In fact, this needed the participation of multiple figures, not only the patient, but also the medical staff and nursing, in order to stimulate the patients to mobilize and re-feed early. Therefore, this study aims to evaluate the adherence to our ERAS protocol and the impact of that in the achievement of the Trifecta success rates in patients undergoing robot-assisted radical cystectomy (RARC) with intracorporeal urinary diversion (ileal conduit or ileal orthotopic neobladder) in a single high volume referral center.

Materials and methods: We considered 140 patients with bladder cancer (BC) undergoing RARC with intracorporeal urinary bowel reconstruction (ileal conduit or ileal orthotopic neobladder) between January 2018 and July 2023. Were excluded from the studies patients underwent salvage surgery, with mental illnesses, non-adherence to the preoperative phase, gastric emptying dysfunction, gastrointestinal motility disorders or incomplete medical records. The data were collected and recorded partly retrospectively and partly by compiling a prospectively database. Clinical data were available for each patient. The adherence to the protocol was defined as follows: no need for NGT repositioning and successful early mobilization (24 h after surgery). Trifecta was defined as follows: in-hospital stay (HS) ≤ 10 days, time to defecation (Ttd) ≤ 5 days and no major complications within 90 post operative days (\geq Clavien–Dindo grade III). Chi-squared test and t-test were used to compare proportion and means.

Results: In the group of ERAS protocol were included patients that no need for NGT repositioning and with successful early mobilization. Patients in this group were 84 vs 56 (60% vs 40%). Patients in the ERAS group had shorter Ttd (4.2 vs. 5.3 days; $p < 0.05$), hS (8.7 vs. 11.2 days; $p < 0.01$) and lower readmission rate (11.9% vs. 16%), even if not clinically significant. Major complications were similar but the rate less in the ERAS group (8.3% vs. 13%). Trifecta success rates were higher for patients in the eras group (59% vs 23.21% $p < 0.05$).

Conclusions: The adherence to the ERAS protocol can safely consent faster bowel recovery and earlier discharge after RARC, reducing surgical burden of robotic surgery, readmission rate and improving perioperative recovery, as suggested by higher rates of Trifecta achievement.

Continence 10S (2024) 101258

doi: <https://doi.org/10.1016/j.cont.2024.101258>

31 - A new Enhanced Recovery after Surgery (ERAS) protocol in patients treated with robot-assisted radical cystectomy: Evaluation of perioperative outcomes and complication

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Introduction and aim of the study: Enhanced recovery after surgery (ERAS) concepts are implemented in various surgical disciplines to improve morbidity, enhance recovery, and reduce hospital stays. To describe our new ERAS protocol used in patients (pts) who underwent robot-assisted radical cystectomy (RARC) with intracorporeal ileal conduit (IIC) or ileal intracorporeal neobladder (NB) reconstructions for bladder cancer. First evaluation after 5 years of RARC in a high-volume referred centre.

Materials and methods: 102 RARC were performed from 2016 to 2022, 60 were IIC and 42 were NB, all operated by the same surgeon. All pts were selected for our ERAS protocol. It consists of preoperative counselling and education of pts and caregivers with optimization of medical and nutrition conditions. No bowel preparation is performed. The day before surgery antithrombotic prophylaxis is started, then continued following guidelines, also antibiotics prophylaxis (piperacillin+tazobactam) is started and followed for 48 h. To create loading carbohydrates the pt takes maltodextrin 800 ml the evening before and 200 ml before the procedure. After surgery, the nasogastric tube (NGT) is removed and support therapy consists of 2000 ml of normal saline for 1 day, metoclopramide 3 per day and paracetamol 3 per day for 48 h. Mobilization is encouraged on the first postoperative day and then progressively day by day. We suggest the use of chewing gum and oral nutrition starts with soft food on the 2nd day and increases progressively. Perioperative, functional outcomes and complications were recorded.

Results: The median age was 74 yrs (range 55–87). Mean BMI was 27 (range 19–40). The mean follow-up was 6 months. The median operative time was 317 min (range 190–530). The median length of hospital stay was 9.6 days (range 5–27). In 4 (4,1%) pts NGT was positioned 48 h after surgery because of

nausea and vomiting and in 11 pts (11.2%) was removed the day after surgery. Mean bowel canalization was 2 days (range 1–7), and defecation was 4,8 days later (range 1–14). 13 pts (12,5%) developed complication Clavien Dindo (CD) < 2 (8 anaemia, 6 urinary infections, 1 pulmonary thromboembolism (TEP), 1 lymphocele, 1 urinoma) and in 10 cases (9,8%) CD > 2, 3 reintervention for abdominal occlusion, 2 for laparocele, 2 lymphocele puncture, 1 nephrostomy positioning, 3 deaths.

Conclusions: These initial results show that a careful nutritional evaluation and progressive rehabilitation are fundamental for a rapid recovery of bowel canalization in RARC with intracorporeal reconstructions. This first analysis shows promising results, a multidisciplinary approach with nutritionists and physiotherapists can improve the recovery of the canalization after surgery.

Continence 10S (2024) 101259

doi: <https://doi.org/10.1016/j.cont.2024.101259>

32 - Delphi consensus on antibiotic prophylaxis in invasive urodynamics

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Introduction and aim of the study: Aim of this study was to report the expert's consensus, according to a modified Delphi method, on the good practice for the use of antibiotic prophylaxis (AB) in the main categories of patients at increased risk of developing urinary tract infections (UTI) associated to invasive urodynamics (UD).

Materials and methods: A systematic literature review was performed on AB before UD. A panel of experts of the Italian Society of Urodynamics Continence Neuro-Urology and Pelvic Floor (SIUD) assessed the review data and decided by a modified Delphi method on 16 statements proposed and discussed by a panel of experts of urodynamics. The cut-off for consensus was a mean score ≥ 7 .

Results: The panel group was composed by 57 experts in functional urology and urodynamics, mainly Urologists, but also Gynaecologists, Physiatrists, Infectivologists, Pediatric Urologists and Nurses. A positive consensus was achieved on 9/16 (56.25%) statements, especially on the need for performing AB before UD in patients with neurogenic bladder and immunosuppression. Urine analysis and urine culture before UD are mandatory and, in case of their positivity it has been approved to postpone UD. A consensus was achieved on avoiding AB in menopausal status, diabetes, age, gender, bladder outlet obstruction, high PVR, chronic catheterization, previous urological surgery, lack of urological abnormalities, pelvic organ prolapse, negative urine analysis.

Interpretation of results: Although AB demonstrated a statistically significant reduction in bacteriuria after UD, no significant decrease in the incidence of UTI has been confirmed. No absolute recommendations on the use of AB in case of relevant potential risk have been reported, although some categories of patients at increased risk of UTI after UD have been recognized. Among our panelists, based on the expertise and available literature data, there was a general agreement on avoiding AB in case of negative urine test and lack of anatomical abnormalities of the urinary tract. Among the main issues that can potentially favor UTI after UD, only in a few set of patients AB was considered useful, while for most of the other categories there was an agreement on not recommending AB.

Conclusions: Antibiotic prophylaxis is not recommended for patients without notable risk factors and with a negative urine test, due to the potential morbidities that may result from antibiotic administration. The evaluation of urine analysis and urine culture, postponing UD in case of their positivity, was considered a good practice, and also performing AB in neurogenic bladder and immunosuppression.

Continence 10S (2024) 101260

doi: <https://doi.org/10.1016/j.cont.2024.101260>

33 - Multicentre study on premature ejaculation treatment with pelvic floor muscle rehabilitation: Analysis of 5 years results

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Introduction and aim of the study: The aim of the study was to evaluate the long-term results of pelvic floor muscle (PFM) rehabilitation in males suffering from lifelong and acquired premature ejaculation. To evaluate PE, patients were investigated with intravaginal ejaculatory latency time (IELT) and the self-report Premature Ejaculation Diagnostic Tool (PEDT). The primary outcomes endpoints were the IELT change, and the score reported at the PEDT.

Materials and methods: This retrospective study evaluated 273 subjects with PE diagnosis (lifelong 198 and acquired 75), and a total of 241 pts out of 273 (88%) completed the rehabilitative protocol, whereas 207 pts (75%) attended the follow-up of 5 years. At baseline, all participants reported an IELT ≤ 60 s and PEDT score > 11 . All Participants completed a 12-week program of PFM rehabilitation, including physio-kinesiotherapy treatment, electrostimulation, and biofeedback, with three sessions per week, with 20 min for each component completed at each session. The effectiveness of intervention was evaluated by comparing the geometric means of IELT times and PEDT scores observed from baseline, to 6, and 12 months during the intervention, and at 24, 36, 48, 60 months postintervention, using a paired sample 2-tailed t-test, including the associated 95% confidence intervals.

Results: 241 out of 273 enrolled subjects completed the PFM rehabilitation protocol with 36 sessions of PFM. All patients reported a significant improvement of the ejaculatory time with a mean IELT of 185.4 s and PEDT score of 2.6 at the 12-week endpoint of the intervention ($p < 0.0001$). Of the 207 participants who completed the 60-month follow-up, 81%, 78%, 75%, and 66% maintained satisfactory and significant results (ejaculatory latency time and PEDT score) through the follow-up times at 24, 36, 48, and 60 months after the PFM training, respectively.

Interpretation of results and conclusions: Our study is the first on PE treatment with a representative number of patients and long-term evaluation (5 years). The results observed are significant and were maintained through the entire follow-up time. PFM rehabilitation in premature ejaculation is an effective therapy with lasting results.

Continence 10S (2024) 101261

doi: <https://doi.org/10.1016/j.cont.2024.101261>

34 - Evaluation of nocturia in patients affected by severe obstructive sleep apnea syndrome by Nocturnal Bladder Capacity Index

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Introduction and aim of the study: The Nocturnal Bladder Capacity Index (NBCi) is useful to distinguish nocturia caused by low bladder capacity from nocturnal polyuria. Obstructive sleep apnea syndrome (OSAS) is a common sleep-related breathing disorder. Moderate to severe OSAS affects 2%–14% of the general population. The NBCi is based on the difference between the “predicted” and actual number of night voids. The more the actual number of night voids exceeds the predicted night voids, the lower is night bladder capacity. The primary endpoint of this study was to evaluate the NBCi in subjects affected by severe OSAS as defined by the apnea-hypopnea index (AHI) ≤ 30 .

Materials and methods: This prospective study was conducted on a cohort of patients suffering from severe OSAS. All patients were studied with a full night polysomnography and all patients were asked to complete a 48-h frequency volume chart (FVC), including the time and volume of each void, bedtime, and time of rising. The FVC provided details regarding the actual number of nightly voids (ANV), nocturnal urine volume (NUV), and maximum voided volume (MVV; i.e., bladder capacity). These data were used to calculate the nocturnal bladder capacity index (NBCi). An unrounded NBCi calculation $\{ANV - [(NUV/MVV) - 1]\}$ was used, with a cut-off value of 1.3, higher values indicate reduced bladder capacity as a cause of nocturia.

Results: In total, 75 eligible patients were identified (mean age 67 years; 57 males, 18 females) and enrolled in the study. The mean AHI was 28.9 (range 27.3–29.2). In all patients the NBCi was above 1.3, with a mean value of 1.43, without significant differences between the two sex ($M = 1.45$ and $F = 1.42$). The mean ANV was 4.1, the mean NUV was 825.6 mL, the mean nocturnal bladder capacity (maximal voided volume at night) was 264.2 mL. Surprisingly, no significant differences were observed between male and female patients. The AHI was significantly correlated with the value of NBCi ≥ 1.3 , $p < 0.001$.

Interpretation of results and conclusions: Nocturia and OSAS are two syndromes that seriously impact patients' quality of life. Severe OSAS (AHI ≤ 30) are significantly related with reduced bladder capacity as a cause of nocturia (NBCi ≥ 1.3). Further studies are needed to better establish the correlation of nocturia and OSAS, in order to understand whether a possible common pathway might support both syndromes.

Continence 10S (2024) 101262

doi: <https://doi.org/10.1016/j.cont.2024.101262>

35 - A comparative study of efficacy assessment of TYTOCARE telemedicine system for home-telemonitoring after radical cystectomy

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Introduction and aim of the study: In this prospective observational single-center study, the effectiveness of using the TYTOCARE telemedicine system for home telemonitoring during the initial postoperative phase following radical cystectomies (RC) was evaluated.

Materials and methods: Patients undergoing RC between March 2021 and August 2023 with internet access were included. Following their discharge, patients were given instructions on how to use the TYTOCARE telemedicine system (TYTO Group) for telemonitoring at home, so, patients completed a daily questionnaire about their symptoms as well as a form measuring vital signs, which included heart rate, body temperature, intestinal peristalsis sounds, diuresis monitoring, and a photo-based assessment of their surgical incisions and ostomy. Weekly telemedicine visits were scheduled. From our prospectively managed database a retrospective control group was recruited. Demographics, perioperative data, and early (i.e., less than 30 days) postoperative complications data were collected. Univariate and multivariate logistic regression (MLR) analysis were performed.

Results: 16 and 189 patients were included in the TYTO and retrospective control group, respectively. The TYTO group saw a significantly reduced rate of medical complications compared to the control group (12.5% vs. 35.1%, $p=0.034$), which also had a longer mean hospital stay (13.3 vs. 10.5 days, $p=0.029$). Even though it was not statistically significant ($p > 0.05$), the TYTO group was characterized by a lower risk of major complications with respect to the control group (12.5% vs. 25.6%). Forty patients (20%) in the control group were readmitted to the hospital, but no patients in the TYTO group were readmitted in the same timeframe. One ostomy infection, wound infection, wound dehiscence, and fever case were identified and treated at home. MLR demonstrated that the only independent predictor of hospital readmission within the first 30 days following surgery (OR 0.79; 95%CI: 0.33–0.91, $p=0.041$) and the only protective factor for both medical (OR 0.35; 95%CI: 0.09–0.98, $p=0.040$) and major complications (OR 0.76; 95%CI: 0.08–0.92, $p=0.033$) was postoperative monitoring with TYTOCARE.

Interpretation of results: TYTO group exhibited a significantly lower rate of medical complications compared to the control group and a shorter mean hospital stay (10.5 days) compared to the control group. TYTOCARE was the only independent predictor of hospital readmission within the first 30 days.

Conclusion: In the first 30 days following surgery, patient postoperative recovery monitoring following RC using the TYTOCARE system may lower the length of hospital stay, the incidence of medical postoperative complications, and the risk of readmissions to the hospital.

Continence 10S (2024) 101263
doi: <https://doi.org/10.1016/j.cont.2024.101263>

36 - Urodynamic evaluation influence patients satisfaction and regret after BPH surgery

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Introduction and aim of the study: The purpose of this study was to assess the role of invasive urodynamic investigation in treatment satisfaction and treatment regret in patients undergoing surgery for LUTS/BPH.

Materials and methods: We performed an analysis of prospectively collected data of consecutive patients undergoing LUTS/BPH surgery in 5 primary care Italian urology centers. All patients underwent detailed clinical history and physical examination, preoperative, perioperative and postoperative characteristics were recorded. Decision regret and satisfaction was evaluated with validated questionnaires. Patients undergoing pressure flow studies preoperatively were compared to patients who did not perform. As well clearly obstructed (Shaffer class ≥ 3) patients were compared to equivocal patients (Shaffer class = 2).

Results: Overall, 526 patients were enrolled. 284/526 (54%) underwent TURP, 40/526 (8%) underwent HoLep, 114/526 (22%) underwent robotic simple prostatectomy and 89/526 (16%) aquablation. Median satisfaction score was 7 (3/7) and median regret score was 10 (10/10). Overall, 320/527 (61%) performed PFS before surgery.

Interpretation of results: Patients with preoperative PFS were more satisfied than patients without preop PFS (Table 1). As well, patients with preoperative PFS presented lower regret and harm rates when compared to patients without preop PFS. In the sub-analysis of patients with preop PFS, no significant differences in terms of satisfaction and regret were recorded ($p > 0,05$).

Conclusions: Preoperative PFS improve treatment satisfaction and regret after surgery for LUTS/BPH. Grade of obstruction does not influence treatment regret and satisfaction.

Table 1
Regret and Satisfaction in patients with or without preoperative PFS.

	PFS preoperatively N=320	No PFS preoperatively N=206	p
Right Decision	320/320 (100%)	185/206 (89%)	0,001
Regret Choice	6/320 (1,8%)	13/206 (6%)	
Same Choice Again	319/320 (99%)	181/206 (87%)	0,001
Harm from Intervention	7/320 (2%)	33/206 (16%)	
Wise Choice	311/320 (97%)	178/206 (92%)	0,001

Continence 10S (2024) 101264
doi: <https://doi.org/10.1016/j.cont.2024.101264>

37 - In how many patients invasive urodynamics should be omitted? Data from a single centre database analysed on the basis of the UPSTREAM trial findings

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Introduction and aim of the study: The role of invasive urodynamics (iUDS) before surgery for benign prostatic obstruction (BPO) is debated. The UPSTREAM trial showed that adding iUDS to the routine care does not decrease the number of patients who will undergo surgery nor ensure better outcomes after surgery. Recent data coming from the same patients show that they could be divided into favourable and unfavourable outcome after surgery according to their IPSS and Qmax. Aim of this study were to find how many patients investigated with iUDS in a single centre before possible surgery for BPO present the favourable characteristics and what are the iUDS findings in the others.

Materials and methods: This is a retrospective study, including males affected by lower urinary tract symptoms (LUTS), eligible to surgery for BPO. Patients with neurologic diseases, previous LUT surgery or with incomplete data were excluded. We collected information about age, IPSS score (including QoL), uroflowmetry and iUDS data, including Bladder Outlet Obstruction Index (BOOI) and Bladder Contractility Index (BCI). All patients were divided into 2 groups using the criteria by Ito et al.: favourable outcome (IPSS > 16, IPSS QoL > 4, Qmax < 10 mL/s, age < 74 years old), unfavourable outcome (presenting at least one of the unfavourable parameters). BOOI and BCI were evaluated in patients with an unfavourable outcome, assuming respectively a cut-off of 48 and 123; the traditional cut-offs of 40 and 100 were also considered.

Results: 212 patients were included in this study. Mean age was 59.1 y. Mean IPSS and IPSS QoL were 20.5 and 4.6. Mean Qmax was 6.4 mL/s. 81 patients (38.2%) were included in the favourable outcome group, whilst 131 (61.8%) had at least one unfavourable criterion. Within the unfavourable group, 97 patients (74.0%) showed a BCI < 123 (112 patients-85.5%-showed a BCI < 100); 63 patients (48.1%) showed a BOOI < 48 (75 patients-57.3%-showed a BOOI < 40); 59 patients (45.0%) showed both a BCI < 123 and a BOOI < 48 (66-50.4%-both a BCI < 100 and a BOOI < 40).

Interpretation of results: Patients with BCI < 123 or/and BOOI < 48 in our series represented more than 50% of patients, 10 unfavourable patients had a Qmax > 15 mL/s and among these only 3 patients were obstructed. So properly used iUDS may provide useful information especially when Qmax is > 15 mL/s. In most cases the decision of a surgical management of BPE is based on patient's preference and QoL condition, then iUDS allows a tailored treatment and a more careful counselling, defining the baseline conditions in term of presence of BOO, DU and/or DO.

Conclusions: According to our findings, patients with parameters suggesting a favourable outcome after surgery seemed to be a minority (38.2%). In the remaining patients iUDS seemed to provide useful information, considering that 74.0%-85.5% showed DU, 48.1%-57.3% showed no or mild obstruction and 45.0%-50.4% both of them, all related to a worse post-operative outcome.

Continence 10S (2024) 101265

doi: <https://doi.org/10.1016/j.cont.2024.101265>

38 - Quality of information and appropriateness of Open AI outputs for urethral stricture management

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Introduction and aim of the study: Chat-GPT, a natural language processing (NLP) tool created by Open-AI, can potentially be used as a quick source for obtaining information related to urethral strictures and their management in urologic department. This study aims to analyze the quality and appropriateness of Chat-GPT's responses to inquiries related to urethral stricture compared to those of the European Urology Association's (EAU) 2023 urethral strictures section.

Materials and methods: Overall, 136 questions were prepared according to the recommendations gathered in the urethral stricture section of the EAU 2023 Guideline. All questions were systematically presented to Chat-GPT's August 3 Version, and two expert urologists independently assessed and assigned scores ranging from 1 to 4 to each response (1: completely correct, 2: correct but inadequate, 3: a mix of correct and misleading information, and 4: completely incorrect). Sub-analysis per chapter and per grade of recommendation were performed.

Results: Overall, 136 recommendations were evaluated. 29/136 (21%) were completely correct, 24/136 (18%) correct but inadequate, 34/136 (25%) a mix of correct and misleading information and 49/136 (36%) completely incorrect. When looking at different chapters, Open AI was particularly accurate in answering questions on history taking and physical examination (2/2, 100% grade 1-2) and follow up (4/6, 67% grade 1). However, endoluminal treatment of anterior urethral strictures in males (3/7, 43% grade 1) and post-traumatic posterior stenosis (4/10%, 40% grade 1) were suboptimal. When looking at the strength of recommendation, no differences in terms of accuracy were recorded when comparing weak and strong recommendations (p>0.05).

Interpretation of results: Chat-GPT hasn't shown high level of accuracy on urethral stricture management according to EAU guidelines.

Conclusions: Chat-GPT has suboptimal accuracy when answering questions on the urethral stricture management EAU guidelines recommendations. Future studies should assess its performance after adequate training.

	Grade 1	Grade 2	Grade 3	Grade 4
Aetiology and Prevention	2 (33%)	1 (16%)	2 (33%)	1 (16%)
History taking and physical examination	0 (0%)	2 (100%)	0 (0%)	0 (0%)

	Grade 1	Grade 2	Grade 3	Grade 4
Endoluminal treatment of anterior urethral strictures in males	3 (43%)	1 (14%)	2 (29%)	1 (14%)
Post-dilatation/direct vision internal urethrotomy strategies	0 (0%)	1 (16%)	4 (66%)	1 (16%)
The role of urethroplasty in the management of penile urethral strictures	2 (20%)	2 (20%)	1 (10%)	5 (50%)
Urethroplasty for bulbar strictures	0 (0%)	1 (10%)	5 (50%)	4 (40%)
Non-traumatic posterior urethral stenosis	6 (38%)	3 (19%)	5 (31%)	2 (13%)
Tissue Transfer	3 (30%)	1 (10%)	4 (40%)	2 (20%)
Post-traumatic posterior stenosis	4 (40%)	2 (20%)	3 (30%)	1 (10%)
Follow-Up	4 (67%)	1 (16%)	1 (16%)	0 (0%)

Continence 10S (2024) 101266

doi: <https://doi.org/10.1016/j.cont.2024.101266>

39 - Quality of information and appropriateness of Open AI outputs for urinary tract infections

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Introduction and aim of the study: Chat-GPT, a natural language processing (NLP) tool created by Open-AI, can potentially be used as a quick source for obtaining information related to urinary tract infection (UTI). This study aims to analyze the quality and appropriateness of Chat-GPT’s responses to inquiries related to urinary tract infections compared to those of the European Urology Association’s (EAU) 2023 UTI.

Materials and methods: Overall, 103 questions were prepared according to the recommendations gathered in the UTI section of the EAU 2023 Guideline. All questions were systematically presented to Chat-GPT’s August 3 Version, and two expert urologists independently assessed and assigned scores ranging from 1 to 4 to each response (1: completely correct, 2: correct but inadequate, 3: a mix of correct and misleading information, and 4: completely incorrect). Sub-analysis per chapter and per grade of recommendation were performed.

Results: Overall, 103 recommendations were evaluated. Overall, 61/103 (58%) were completely correct, 18/103 (17%) correct but inadequate, 20/103 (19%) and 4 (4%) incorrect. When looking at different chapters, Open AI was particularly accurate in answering questions on pyelonephritis (6/7 grade 4) and sepsis (6/6 grade 4). However, answers regarding UTIs (12/38: 32% < grade 3) and antibiotic prophylaxis (4/10:40% < grade 4) and were suboptimal. When looking at the strength of recommendation, no differences in terms of accuracy were recorded when comparing weak and strong recommendations ($p > 0.05$).

Interpretation of results: Chat-GPT has shown suboptimal accuracy when answering questions on the UTI EAU guidelines recommendations.

Conclusions: Since suboptimal accuracy was observed when answering questions on the UTI EAU guidelines recommendations, future studies should assess Chat-GPT performance after adequate training.

	Grade 4	Grade 3	Grade 2	Grade 1
UTI	18/38 (47%)	8/38 (21%)	9/38 (24%)	3/38 (8%)
Pyelonephritis	6/7 (85%)	1/7 (15%)	0%	0%
Urosepsis	6/6 (100%)	0%	0%	0%
Urethritis	3/6 (50%)	2/6 (33%)	1/6(16%)	0%
Prostatitis	9/12 (65%)	2/12 (14%)	1/12 (7%)	0%
Epididymitis	3/5 (60%)	1/5 (20%)	1/5 (20%)	0%
Fournier	2/3 (66%)	0%	1/3 (33%)	0%
HPV	6/8 (75%)	0%	2/8 (25%)	0%
TBC	4/8 (50%)	2/8 (25%)	2/8 (25%)	0%
Prophylaxis	4/10 (40%)	2/10 (20%)	4/10 (40%)	0%

Continence 10S (2024) 101267

doi: <https://doi.org/10.1016/j.cont.2024.101267>

40 - Changes in referred urinary symptoms and urodynamic at high altitudes. Results from an expedition to the Ev-K2 pyramid in the Himalayan region

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Introduction and aim of the study: Human adaptive responses to altitude-induced hypoxia have been understudied in the domain of micturition effects. Our primary objective was to assess the impact of hypobaric hypoxia at elevated altitudes on urodynamic measures and self-reported symptoms.

Materials and methods: A cohort of ten healthy, gender-balanced adults, median age of 40 years (IQR 28–53), underwent comprehensive urodynamic tests at Kathmandu (1350 mt asl) and Pyramid Ev-K2 (5000 mt asl). Concurrent anthropometrics and peripheral capillary oxygen saturation were collected and analysed with the Wilcoxon Test for paired datasets. For the studies we used the following materials: a portable urodynamic system CREO MEDICAL mod. SMARTDYN COMPACT with a flow sensor, infused volume sensor, pump and 2 pressures modules; water transducers for measuring PVes and PABd; 2 extensions lines to connect each transducer to the relative catheter; 10 fr rectal catheter, 2 ways with non-open balloon, to record PABd; 6fr vesical catheter, 2 ways, to record PVes and infusion; pump tube and 500 cc Saline bag. The urodynamic equipment was calibrated for each signal, before the examinations in both locations, in Kathmandu and in Ev-K2 Pyramid. At 5000 mt asl the saline solutions were warmed up at body temperature (37.0 °C) for 15 min. All the studies were performed following ICS guidelines, zeroing the pressures at the level of pubic symphysis and in sitting position.

Results: A decline in median IPSS at higher altitudes compared to lower was recorded (1.5 vs 3.0; $p=0.031$). Individual IPSS items showed no significant variance. Among all urodynamic metrics, the first urge to micturate was observed at a bladder volume of 196 ml (IQR 130–272) at the elevated terrain, in contrast to 171 ml (IQR: 102–220) at the lower ($p=0.037$). No shifts in other urodynamic parameters were detected. As expected, a marked dip in oxygen saturation at elevated versus lower terrains was recorded ($82 \pm 6\%$ vs. $95 \pm 3\%$, $p < 0.001$).

Interpretation of results: The data suggests decreased urinary symptoms at higher altitudes as seen by the median IPSS reduction. Urodynamic analysis revealed a delayed onset of the initial urge to urinate at increased bladder volumes at high altitude, suggesting adaptation to hypoxia, probably due to an elevated sympathetic response that contributed to an elevation of the mechanoreceptive threshold relevant to micturition. Other urodynamic outcomes were not affected by altitude. The decreased oxygen saturation at Pyramid Ev-K2 is consistent.

Conclusions: Understanding factors modifying mechanoreceptive sensitivity is crucial for diagnosing and managing bladder disorders related to hypoxic conditions. These findings may have implications for individuals at high altitudes or in patients with chronic hypoxia and for healthcare professionals managing urinary symptoms in these populations, but further research is needed.

Continence 10S (2024) 101268

doi: <https://doi.org/10.1016/j.cont.2024.101268>

41 - Transobturator tape versus bulking agent: A randomized controlled trial

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Introduction and aim of the study: The aims of this study were to compare the outcomes, and the complications of TOT and transurethral bulking agent (BA) treatments in women with naive SUI.

Materials and methods: This was a randomized controlled trial comparing TOT and BA (Bulkamid®) for naive SUI. The study was approved by Ethics Committee and patients provided written informed consent. Inclusion criteria were: age over 18 years, SUI not responsive to conservative treatment, no previous incontinence surgery, without bladder obstruction. Exclusion criteria were: previous POP surgery; comorbidities such as diabetes or neurological disease; POP \geq stage II. Preoperative work out included: history; pelvic examination; urodynamic study, trans labial ultrasound. Patients completed self-administered UDI-6, IIQ7, FSFI. Patients were followed up at 1, 3, 6, and 12 months after surgery. At each visit, patients underwent clinical examination, evaluation of urinary and sexual symptoms, uroflowmetry with PVR measurement and PGI-I questionnaire. Furthermore patients completed UDI-6, IIQ-7, FSFI questionnaires. The complications was classified using both the ICS/IUGA and Clavien–Dindo classification.

Results: 55 women have been randomized to TOT and to 49 BA. The mean follow-up was 15 ± 2.3 months. No significant inter-group differences emerged in the pre-operative evaluations of age (mean 53.2 vs 50.22 for TOT and BA respectively, $p=0.06$) and BMI (mean 24.12 vs 25.47 kg/m² for TOT and BA respectively, $p=0.55$). Table 1 showed a success rate after TOT of 96% and 85% after BA. The rate remained constant for one year of follow-up for TOT while it decreased significantly for BA after 6 months reaching 36% at one year. Fifteen of these patients underwent new bulking infiltration, 16 chose a definitive implant with TOT. Only 2 grade III complication according to Clavien–Dindo classification has been reported in the TOT group (vaginal mesh exposure 2AaT3S2). After one year, the difference in questionnaire scores between the two procedures was statistically significant ($p=0.01$), showing a worse impact on patients' quality of life and sexuality for BA.

Interpretation of results: Our results demonstrate that both TOT and the bulking agent can be used in a naïve patient, but the results after one year are lower for the bulking agent. Probably it is due to the different mechanism of action and the material of the bulking agent. Further bioengineering or radiology studies could be useful to better interpret the different outcomes.

Conclusions: Bulking agent is a procedure that can be used in naive patients, it has a greater safety profile but at 12 months the results are worse than the sling.

Table 1
Urinary incontinence during follow up after TOT and Bulking agent treatment.

Data	1 Month after surgery			3 months after surgery			6 months after surgery			12 months agyer surgery		
	TOT	Bulkamid	P Value	TOT	Bulkamid	P Value	TOT	Bulkamid	P Value	TOT	Bulkamid	P Value
Objective cure rate	96.2	85.7	<0.0001	96.2	85.7	<0.0001	96.2	57.1	<0.0001	96.2	36.7	<0.0001
Subjective cure rate	98.4	86.3	<0.0001	98.4	86.3	<0.0001	94.2	52.7	<0.0001	94.2	35.7	<0.0001
De novo OAB wet	1.9	4.4	<0.0001	1.9	4.4	<0.0001	1.9	4.4	<0.0001	1.9	4.4	<0.0001
De novo OAB dry	3.1	5.2	=0.001	3.1	5.2	=0.001	3.1	5.2	=0.001	3.1	5.2	=0.001

Continence 10S (2024) 101269
doi: <https://doi.org/10.1016/j.cont.2024.101269>

42 - Intravesical treatment with Hyaluronic Acid and Chondroitin Sulphate in patients with recurrent urinary tract infections: Which protocol of instillations to use?

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Introduction and aim of the study: Therapy based on the reinstatement of the glycosaminoglycan (GAG) bladder epithelium has been demonstrated effective and safe for the treatment of recurrent urinary tract infections (r-UTIs). Standardized protocol of intravesical instillations of hyaluronic acid (HA) and chondroitin sulphate (CS) for the r-UTI's therapy has not yet been proposed. Aim of the study was to compare the safety and efficacy of two different protocols of instillations of HA+CS in patients with r-UTIs.

Materials and methods: This was a prospective, multicentre Italian study, enrolling women with age >18 years, with r-UTIs, defined as European Association of Urology guidelines on urological infections, with a diagnosis of r-UTI confirmed by positive urine culture. Women underwent medical and urological history, uroflowmetry (UF), VAS score (to evaluate pelvic pain), urinalysis and culture. Based on treatment protocol, patients were divided in group A (HA+CS administered once weekly for 4 weeks and then once monthly for 12 months) and group B (HA+CS administered once weekly for 8 weeks and then once monthly for 12 months). Baseline evaluation was repeated in the two groups at 1- 3- 6 and 12-month follow-up.

Results: 137 patients (group A: 67 pts; group B: 70 pts) from 5 centres were included. Mean (±SD) age was 58.6 (±17.3) in group A and 52.6 (±14.3) in group B. No patients were in antibiotics therapy at the start of HA+CS therapy. All storage symptoms significantly decreased and VAS score increased during the therapy and at the last follow-up, without significant differences between the two groups (Table 1). UTIs' episodes at the last follow-up were 0.6 ± 0.5 in group A and 0.7 ± 0.3 in group B, respectively (p < 1). No significant differences were observed regarding UF parameters during the treatment in both groups.

Table 1
Urinary symptoms, VAS score and UF parameters, before and after HA+CS treatment.

	Pre-Instillations		10-mos Follow-up		3-mos Follow-up		6-mos Follow- up		12-mos Follow up	
	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
Increased day time urinary frequency (%)	55/67 (82.1%)	57/70 (81.4%)	40/67 (59.7%)	44/70 (62.8%)	35/67 (52.2%)	38/70 (54.2 %)	23(/67 (34.3%)	25/70 (35.7%)	17/67 (25.3%)	19/70 (27.1%)
Increased night time urinary frequency (%)	23/67 (34.3%)	26/70 (37.1%)	22/67 (32.8%)	24/70 (34.3%)	19/67 (28.3%)	20/70 28.5	13/67 (19.4%)	14/70 (20%)	9/67 (13.4%)	9/70 (12.8%)
Urgency episodes/day (%)	33/67 (49.2%)	37/70 (52.8%)	17/67 (25.4%)	18/70 (25.7%)	8/67 (11.69%)	9/70 (12.8%)	7/67 (10.4%)	9/70 (12.8%)	8/67 (11.9%)	9/70 (12.8%)
UI epsiodes/day (mean ± SD)	11/67 (16.4%)	10/70 (14.3%)	7/67 (10.4%)	7/70 (10%)	4/67 (5.9%)	5/70 (7.1%)	4/67 (5.9%)	4/70 (5.7%)	3/67 (4.5%)	5/70 (7.1%)
UF (Q.max) (mean ± SD)	20.1±6.1	24.1±5.2	19.5±5.1	23.3±4.2	21.2±6.2	24.7±5.6	20.1±6.1	22.5±7.1	22.7±5.3	20.1±6.1
PVR (mean ± SD)	20.1±7.2	18.1 ± 8.9	19.8 ± 8.2	18.9 ±9.1	21.7 ±7.3	19.1±7.5	18.8±7.5	18.8±9.2	20.8±8.2	18.9±7.3
VAS (mean ±SD)	4.5 ± 0.3	4.7 ± 0.1	5.7 ± 0.8	5.9 ± 0.3	6.2 ± 1	6.5 ±0.7	6.4 ±0.8	6.4±0.5	7.3±0.5	7.5±0.3

P: Between group A/ Group B for each item and follow-up. Non statistical differences were found.

Interpretation of results: This study showed that HA+CS is a safe and effective treatment for r-UTIs. After 12 months of treatment, the vast majority of the patients was cured or significantly improved. No significant differences were noted between the two protocols of instillations. From an economic point of view and due the comparable results, protocol of group A is recommended compared to group B.

Conclusions: To date, there is a growing body of evidence indicating the benefit of restoring GAGs bladder layer therapy in the treatment and prevention of r-UTIs, but there is no standardized protocol of instillations yet. Our data showed comparable clinical effectiveness in urinary symptoms, pelvic pain and

UTIs recurrence between the two protocols proposed. If the cost-effectiveness profiles are considered, based on the cost-analysis, protocol A is the most suitable one.

Continence 10S (2024) 101270

doi: <https://doi.org/10.1016/j.cont.2024.101270>

43 - Complete urodynamic study in Robot-assisted Radical Cystectomy (RARC) with intracorporeal orthotopic neobladder (ICON): Prospective comparison of Y and modified Y Bordeaux reconfigurations

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Introduction and aim of the study: Both Y and modified Y reconfigurations are technically feasible with robot-assisted approach. Good functional outcomes of both reconfigurations have already been demonstrated but urodynamic data are lacking. Objective of this study is to compare urodynamic outcomes in robot-assisted intracorporeal Y (yICON) and modified Y "Bordeaux" (myICON) neobladder.

Materials and methods: We prospectively enrolled 13 patients diagnosed with muscle-invasive bladder cancer (MIBC) between January 2018 and June 2023. Robot-assisted radical cystectomy (RARC) with ICON was performed by the same experienced robotic surgeon either with Y reconfiguration or modified Y Bordeaux reconfiguration. The choice was based on surgeon's preference. Complete demographic, perioperative and pathologic data were collected and both non-invasive and invasive urodynamic study were performed three months after surgery. Urodynamic parameters were compared between yICON and myICON using Chi-square Test for frequencies and Student t-test for independent samples for means.

Results: Mean age at surgery of 63.3 ± 9.9 yr. Patients in yICON and myICON groups were 6 (46.2%) and 7 (53.8%), respectively. No statistical difference in analyzed parameters (Charlson comorbidity index, BMI, ASA score, TURB pT stage and grade) was evidenced between the two groups. The overall mean operative time was 524 ± 163 min. Mean hospital stay was 10.8 ± 3.7 days. Time to catheter removal 16.9 ± 4.6 days. We observed 3 (23.1%) grade 3 postoperative complications and no higher-grade postoperative complications. The mean number of pads per day was 1.1 ± 1.9 with a mean number of voluntary voids per day of 5.5 ± 1.9 . In our population 13% of patients needed intermittent self-catheterization. Postoperative uroflowmetry showed overall voided volume and a post void residual (PVR) of 230 mL and 207 mL respectively with voided volume being slightly higher in myICON compared to yICON (384 mL vs 114 mL $p=0.2$). Pressure flow study revealed high overall maximum cystometric capacity (MCC) 535 mL in myICON vs 489 mL in yICON ($p=0.8$) with a mean of 505 mL. The comparison between the two groups showed no statistical difference in mean compliance (41.5 ± 34 mL/cmH₂O) and mean pressure at MCC (PvesMCC) 25.9 ± 16 cmH₂O ($p = 0.7$). Maximum urethral closure pressure was 76.8 and 44.4 cmH₂O in myICON and yICON group respectively ($p = 0.1$) while mean functional urethral length was 4.5 ± 1.5 cm. Mean follow-up period was 21.3 ± 18.5 months.

Interpretation of results: In our experience, yICON and myICON provide equivalent urodynamic outcomes.

Conclusions: Considering the limited number of patients, larger populations and longer follow-up are needed to further evaluate urodynamic outcomes in ICON.

Continence 10S (2024) 101271

doi: <https://doi.org/10.1016/j.cont.2024.101271>

44 - Pelvic organ prolapse and lower urinary tract symptoms: The role of detrusor underactivity

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Introduction and aim of the study: To assess the relationship between detrusor underactivity (DUA) and lower urinary tract symptoms (LUTS) in women with symptomatic pelvic organ prolapse (POP).

Materials and methods: In this prospective study, women with symptomatic anterior POP (stage 2–4 POP quantification system -POP-Q) were enrolled. All patients underwent preoperative urodynamics (UD), LUTS were recorded. Patients were included in DUA group when met at least one of the following UD criteria validated for women: (i) Jeong; (ii) Abarbanel/Marcus; (iii) BVE criteria; (iiii) PIP1 Griffiths. Patients could be included in multiple DUA groups according to the criteria used. The control group (CG) consisted of women with symptomatic POP and non-DUA.

Results: Data on 330 women (mean age 63.7 ± 18.4 y.o.) with symptomatic anterior POP was complete. DUA rate was 50.3% (166 females), while CG comprised 164 pts (49.7%). In DUA-G main UD data were: mean Pdet/Qmax 11cmH₂O, mean Qmax 10 mL/s, mean PVR 190 mL. In CG, mean Pdet/Qmax was 20cmH₂O, mean Qmax 15 mL/s, mean PVR 70 mL. Rates of main storage and voiding LUTS were significantly higher in DUA-G, except for slow stream that did not reach any statistical difference between groups (Table 1).

Interpretation of results: In women with POP, LUTS are supposed to be related to an obstructive mechanism. However, the higher rate of LUTS in DUA-G indicates that also the detrusor impairment may have a role. DUA may be related to chronic bladder outlet obstruction (BOO), but also to an overstretching of muscle fibers caused by bladder descensus that may reduce their efficiency in contractility. DUA may be the result of a more prolonged BOO and a longer damage on the bladder wall and detrusor, causing also greater storage disorders. Women with normal detrusor may have suffered minor damage and this could explain lower rate of storage LUTS. Voiding symptoms are prevalent in DUA-G, and this is likely due to the concomitant negative influence of BOO and detrusor impairment. Preoperative UD may be useful to diagnose the etiopathogenetic mechanism of LUTS and better tailor surgical counselling.

Conclusions: Our data showed higher rates of LUTS in POP women with DUA. This finding highlight that emptying disorders may be only partially due to POP-related BOO, while in a non-negligible percent of women they may depend also on detrusor impairment.

Table 1
Different LUTS prevalence between DUA-G and CG.

Symptoms	DUA n 166	Control group n 164	p
Slow stream pts (%)	130 (78.3%)	78/164 (57.3%)	0.1
Straining pts (%)	81 (48.8%)	65 (39.6%)	0.008
Hesitancy pts (%)	69 (41.6%)	56 (34.1%)	0.004
Urgency pts (%)	129 (77.7%)	107 (65.2%)	0.05
Frequency pts (%)	117 (70.5%)	75 (45.7%)	0.08

Continence 10S (2024) 101272

doi: <https://doi.org/10.1016/j.cont.2024.101272>

45 - Efficacy of transobturator vaginal tape (TVT-O) in the treatment of Coital Incontinence

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Introduction and aim of the study: The effect of suburethral sling on sexual functioning has been studied, but results on coital incontinence (CI) are still poor. Aim of this study was to prospectively evaluate the impact of surgical procedure of transobturator vaginal tape (TVT-O) implant on CI concomitant with stress urinary incontinence (SUI).

Materials and methods: TVT-O was performed on sexually active women diagnosed with urodynamic (UD) SUI, who also experienced CI with penetration and/or orgasm. At baseline patients underwent to history, vaginal inspection, urodynamics (UD), and VAS scale to assess the impact of CI on Quality of Life (0=worse;10=best). Patient-reported success rate on CI was assessed by the International Coital Incontinence-Questionnaire (ICFI-Q). To date, this is the only validated tool to assess CI. The changes of IFCI-Q scores before and after the surgery were compared. Patients underwent to 3 and 6 months follow-up with the ultrasound evaluation of post-void residual volume (PVR), the IFCI-Q and VAS scale. Objective success was defined by a negative stress test in cline and orthostatism with a 200 and 300 ml of bladder filling. Patients with pelvic organ prolapse \geq 2, OAB symptoms, intrinsic sphincter deficiency, neurogenic bladder were excluded.

Results: 37 women with UD SUI complaining of CI at baseline were enrolled. Mean(\pm SD) age was 52.8 ± 10.2 years. Patients underwent to implant of TVT-O. At 6- month follow-up, success rate was 91.3%. All pre-operative sexually active women reported resumption of sexual activity after sling surgery. Comparison of pre- and post-operative IFCI scores revealed a significant improvement of the total IFCI score. At baseline 30/37 (81.1%) women complained of CI at penetration and 7/37 (18.9%) refer both types of CI (IFCI [mean \pm SD]: 8.1 ± 0.8 , moderate CI). According to the IFCI scores, at 3 and 6- mos follow-up, has been demonstrated a decrease in frequency of CI, an improvement in quality of intercourse, and in the psychological status of patients ($p < 0.00$). 34/37 (91.89%) patients at 3 and 6- mos follow-up reached the resolution of SUI and CI (IFCI score: 0). 3/37 (8.1%) patients complaining of mild SUI and the persistence of CI at penetration, at 3 and 6- mos follow-up (IFCI: 5.8 ± 0.3 , mild CI; $p < 0.00$). VAS score improved from 5.1 ± 0.7 to 7.6 ± 1.7 ($p < 0.01$). No statistical increase of PVR was observed at 3 and 6 mos follow-up.

Interpretation of results: To date this is the first study evaluating the efficacy of surgical procedure of TVT-O on CI, directly with a specific and standardized tool on CI. Our clinical results of success rate after TVT-O procedure are in line with literature.

Conclusions: This study demonstrate that TVT-O procedure is an effective and secure treatment not only for SUI but also for CI. This is the first time that CI has been evaluated before and after the surgery by a validated questionnaire specific to CI.

Continence 10S (2024) 101273

doi: <https://doi.org/10.1016/j.cont.2024.101273>

46 - Changes of uroflowmetry parameters in women with recurrent urinary tract infections: A multicenter comparative Italian study

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Introduction and aim of the study: To assess the main uroflowmetry (UF) parameters in women with recurrent UTI (rUTI) and compare these patterns with those of females without rUTI.

Materials and methods: This Italian comparative multicenter prospective study involving Tertiary Hospitals enrolled women with rUTI (Group A — GA) according to EAU definition, and women without a history of rUTI and voiding dysfunctions (Group B — GB) (Nov 2022–Sept 2023). Exclusion criteria was neurologic history, pelvic radiotherapy. Urological history, UF parameters with post-void urine residual (PVR), Liverpool nomogram and traces analysis (irregular or regular), Bladder Voiding Efficiency (BVE), lower urinary tract symptoms (LUTS) were recorded.

Results: Data were collected by 9 urological centers on 638 women (median age 55 y.o. 41–67): GA 312 (48.9%) with median age 52 y.o (32–65), GB 326 (51.1%) with median age 59 y.o. (44–70). Storage ($p<0.05$) and voiding ($p<0.001$) symptoms were significantly higher in GA. All UF parameters, except voided volume, were significantly worse in GA, and median Qmax was 22.2 ml/ vs 20 ml/s, median PVR 10 ml vs 0 ml, in GA and GB respectively. BVE was significantly lower in GB ($p<0.001$). UF traces were significantly more irregular in GA than in GB ($p<0.05$), but Liverpool analysis did not show any statistical difference ($p=0.398$).

Interpretation of results: This study enrolled a great number of women with or without rUTI. LUTS were more prevalent in GA. Although most UF parameters were significantly worse in GA, these results were of little clinical relevance. Indeed, the differences in each parameter between the groups were generally low. UF traces in GA were significantly more irregular, with wavy curves, probably due to mucosal and muscle infection-associated inflammation that can interfere with storage and voiding phases. Liverpool analysis did not show any significant difference. This finding may be related to the slight difference, although statistically significant, between the main UF parameters in the groups.

Conclusions: UF parameters resulted worse in the rUTI group, although with differences clinically poor relevant. The warning could be represented by alterations in the morphology of UF traces, since these are generally pathological in women with rUTI. UF may allow to recognize women with rUTI and pathological micturition pattern that could be at higher risk of urodynamic complications and that could be more strictly followed-up.

Continence 10S (2024) 101274

doi: <https://doi.org/10.1016/j.cont.2024.101274>

47 - Levator ani muscle trauma after delivery: The role of perineal ultrasound in early detection of postpartum lesions

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Introduction and aim of the study: Pregnancy-induced changes and the biomechanical stresses of vaginal delivery contribute to pelvic floor injuries and disorders, including urinary incontinence, pelvic organ prolapse, and dyspareunia. Understanding the postpartum incidence of levator ani muscle (LAM) injuries and their correlation with perineal outcomes is crucial. The aim of this study is to evaluate these findings through clinical and ultrasound diagnostics, correlating urogynecological signs with symptoms and exploring potential preventive measures.

Materials and methods: This prospective single center interventional study enrolled 207 term primiparous women who underwent vaginal delivery since 2022. Participants underwent clinical and ultrasound urogynecological evaluations, a 3D endovaginal ultrasound evaluation, at least six weeks postpartum, considered the optimal timeframe to identify potential muscle injuries. We evaluated specific parameters, such as the morphology of the LAM and the hiatus area during rest, contraction, and Valsalva maneuver to detect LAM injuries. FSDS and ICI-Q questionnaires were also used to assess the prevalence of dyspareunia and urinary incontinence before and after childbirth among the patients.

Results: Postpartum prolapse was observed in 54% of cases; urinary incontinence was present in 42%; dyspareunia rates at 18% before delivery and reached 30% in the postpartum period. Ultrasound revealed partial injuries in 45% of cases, asymmetries in 0.5%, ballooning in 7%, and total avulsions in 2.5%. There was no significant difference in urogynecological symptoms in women with different perineal macroscopic lesions, but interesting correlations were found between ultrasound anomalies and symptoms: patients with ultrasound heterogeneity clinically present with command inversion, and patients with muscle asymmetries or larger areas of the urogenital hiatus on ultrasound present with hypertonicity.

Interpretation of results: Contrary to prior beliefs, true LAM avulsions were less common (2% vs 16%). The study attributes this difference to variations in childbirth experiences and ultrasound evaluation techniques. The use of a rotating 3D probe provided more accurate assessments without compressing pelvic structures, impacting the interpretation of muscle injuries. Despite minimal symptoms immediately postpartum, subtle muscle injuries were detected, emphasizing the importance of early detection to prevent future pelvic floor disorders.

Conclusions: The study underscores the impact of childbirth on pelvic floor health, highlighting the need for comprehensive evaluations after delivery. Even minor muscle injuries can lead to long-term complications, underlying the importance of early detection and preventive measures.

Continence 10S (2024) 101275

doi: <https://doi.org/10.1016/j.cont.2024.101275>

48 - Validation of the Italian version of the O'Leary Sant questionnaire for patients with bladder pain syndrome/interstitial cystitis

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Introduction and aim of the study: One of the most widely used questionnaires for BPS/IC diagnosis is the O'Leary Sant questionnaire. This includes a Symptom Index (ICSI) and a Problem Index (ICPI). To date, the O'Leary Sant questionnaire has not been validated in the Italian language. As such, this study aims to validate the Italian translations of both ICSI and ICPI for use with Italian patients.

Materials and methods: This is a prospective observational study conducted in tertiary Italian care centre for BPS/CI since 2022. We enrolled women with BPS/IC aged over 18 years, able to read and write in Italian, and without neuropsychiatric disorders, alongside an age-matched control group without BPS/IC. Translation was performed according to the established guidelines. The reliability of the questionnaire was assessed using internal consistency (Cronbach's alpha), and test-retest reliability (intraclass correlation coefficient — ICC). The construct validity was determined first by Pearson's product moment correlation coefficient (Pearson's *r*) as coefficient of stability for inter-item correlations between ICSI and ICPI, and secondly by the ICC.

Results: We included 102 patients with BPS/IC and 51 controls in two years. All patients completed the retest two weeks after the first administration. The ICC for the ICSI total score was 0.97 (95% confidence interval [CI]; 0.96–0.98) and 0.96 for ICPI (95% CI; 0.94–0.97), suggesting an excellent reproducibility. Discriminant validity was evaluated by comparing BPS/IC patients' scores with those of controls. Statistically significant differences between the mean scores were observed on both the total domain scores (12.67 ± 3.00 vs 1.82 ± 2.09 ; $p < 0.001$ for ICSI and 12.98 ± 2.54 vs 1.43 ± 2.07 ; $p < 0.001$ for ICPI, respectively), as well as on single items. Pearson's *r* reported highly significant direct correlations between scores in the same domain. The ICPI model also showed a good reliability, with a Cronbach's alpha of 0.72. Similar behaviour and similar indices were observed for the ICSI model, which registered a Cronbach's alpha of 0.70. The final combined model reached a high reliability (Cronbach's alpha of 0.78).

Interpretation of results: Our data demonstrates that our Italian version of the O'Leary Sant questionnaire showed a good reliability. We found a good internal consistency and reproducibility. Moreover, our study shows that the Italian version of the O'Leary-Sant questionnaire discriminates BPS/IC patients from healthy volunteers.

Conclusions: Italian versions of ICSI and ICPI have been demonstrated as reliable, consistent, and valid instruments to evaluate symptoms of Italian speaking patients with BPS/IC in both clinical practice and scientific studies.

Continence 10S (2024) 101276

doi: <https://doi.org/10.1016/j.cont.2024.101276>

49 - Prevalence of pelvic floor dysfunctions in women with endometriosis

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Introduction and aim of the study: Endometriosis and pelvic floor disorders (PFD) share common pathogenic mechanisms, but it is not known whether endometriosis can cause, develop or exacerbate PFD, including lower urinary tract symptoms (LUTS), sexual dysfunction, fecal incontinence (FI) and constipation. The aim of this study is to determine the prevalence of symptoms of PFD in women with endometriosis.

Materials and methods: A cross-sectional study involving women aged 18 to 50 years who have been diagnosed with endometriosis. Participants completed a web-based questionnaire. Volunteers signed and submitted self-administered questionnaires such as Urinary Distress Inventory (UDI-6); Colorectal-Anal Distress Inventory (CRADI-8) (scores stratified as moderate (34–66) or severe (67–100)); Wexner Constipation Score (6–10 moderate, 11–15 severe, and 16–30 very severe); Wexner FI Score (0 (perfect continence) to 20 (severe fecal incontinence)); Endometriosis Health Profile Questionnaire (EHP-30) for the evaluation of quality of life (QoL) (score 0–100, the lower the score, the better the QoL); and the Female Sexual Function Index (FSFI) (score < 26.5 was considered risk for sexual dysfunction).

Results: Of the 832 participants enrolled in the epidemiological study, 537 completed all questionnaires (response rate of 64.5%). The mean age was 36.9 ± 6.9 years. The prevalence of LUTS was 24.3% moderate and 20.2% severe symptoms, and the prevalence of anorectal symptoms was 56.4% moderate and 11.7% severe symptoms, associated with 30.5% moderate, 28.1% severe and 19.5% very severe constipation. The mean UDI-6 score was 46.9 ± 23.7 and the mean CRADI-8 score was 42.4 ± 20.2 . The mean Wexner Constipation Score was 10.6 ± 5.6 and Wexner FI Score was 2.4 ± 2.3 . Regarding EHP-30, the lowest/better mean score was 34.6 ± 26 for the *Pain* subscale, while the highest/worst mean scores were the *Self-Image* and *Social Support* subscales, 54.7 ± 29.2 and 54.9 ± 30 , respectively. For the other subscales, the mean score for the *Emotional Wellbeing* subscale was 48.7 ± 24.6 , and the *Control and Powerlessness* subscale was 48.4 ± 31.1 . The prevalence of sexual dysfunction was 81%. This correlated with a mean FSFI score of 17.4 ± 9 , which is associated with sexual dysfunction.

Interpretation of results: These results show that patients with endometriosis have an important prevalence of PFD. In addition, these symptoms can have an important impact on quality of life.

Conclusions: This study found a high prevalence of PFD in women with endometriosis and this impacts on their quality of life. It is necessary to evaluate patients about PFD and offer them the possibility of multidisciplinary treatment.

Continence 10S (2024) 101277

doi: <https://doi.org/10.1016/j.cont.2024.101277>

50 - Vaginal mesh exposure after colposacropexy: A good learning curve is a good starting point

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Introduction and aim of the study: The primary aim of our study was to evaluate the senior surgeon's open, laparoscopic and robot-assisted colposacropexy (CSP) learning curve, and to assess the trend of the vaginal mesh exposure rate over the years. The secondary objective was to assess how many procedures are needed to reduce the vaginal exposure rate.

Materials and methods: It is a retrospective study conducted in a III level urogynecological center. Vaginal mesh exposure rates were analyzed in women with advanced pelvic organ prolapse who underwent colposacropexy with or without uterine preservation. The procedures included also total and subtotal hysterectomy by open, laparoscopic and robot-assisted access from 1995 to 2022. All the procedures were performed by a single surgeon. Vaginal mesh exposure assessment was performed by a different urologist. Follow-up was conducted at 1, 3, 6, 12 months postoperatively and then annually.

Results: 557 procedures were included in the analysis: 267 open, 214 laparoscopic, 76 robotic CSPs. All the procedures were performed using polypropylene or PVDF meshes. The same surgeon began his experience passing from the open approach to the laparoscopic and then robotic one in sequence. The total mesh vaginal exposure rate after open CSP was 4.5%. In the first 8 years, 6 CSPs were performed in women who had already undergone hysterectomy and in 19 cases the uterus was preserved (HSP). In this period the vaginal mesh exposure rate tended to increase in time and this is due to the increasing number of hysterectomy (HY) associated with CSP (16% in the first 25 HY procedures). After about 20 colposacropexy procedures the rate decreased significantly and from 2006 to 2022 it was 1.9% (3/154). The total mesh vaginal exposure rate for laparoscopic CSP was 5.6%. Laparoscopic approach started in 2003. The introduction in 2014 of concomitant HY increased significantly the mesh exposure rate (15% in the first cases). Again, after 20 procedures the total exposure rate tended to decrease. In 2018 subtotal HY (hysterectomy with uterine cervix preservation) was introduced and no exposure was reported. Robotic assisted CSP started in 2014 and total vaginal exposure rate is 2.6%. All the exposure was in patients who underwent HY. After 12 procedures the exposure rate went to 0. In the 47 sub-total HY (7 open, 25 laparoscopy and 15 robot-assisted) no mesh exposure was reported.

Interpretation of results: Our results demonstrate that the rate of vaginal exposures decreases more rapidly with the learning curve of robotics, thanks to the advantages that the surgeon has in carrying out the robotic approach.

Conclusions: Our study confirmed the decrease of vaginal exposure rate after CSP in experienced surgical hands, independently to the approach.

Continence 10S (2024) 101278

doi: <https://doi.org/10.1016/j.cont.2024.101278>

51 - Readjustable sling procedure (Remeex System) for female stress urinary incontinence: Over 7 years follow-up, a single Italian centre experience

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Introduction and aim of the study: This study hypothesized that adjusting the tension after surgery would benefit patients with detrusor underactivity (DU) or recurrent stress urinary incontinence (SUI) after anti incontinence surgery. The aim of this study was to evaluate the long term outcomes and complications of the Remeex system in women treated in a single centre.

Materials and methods: It is a prospective study conducted from 2014 to 2023. The study was approved by Ethics Committee and patients provided written informed consent. Inclusion criteria were: age over 18 years, recurrent SUI after anti incontinence surgery, or women with SUI and DU. Exclusion criteria were: previous POP surgery; comorbidities such as diabetes or neurological disease; POP ≥ stage II. Preoperative work up included: history; pelvic examination; urodynamic study, trans labial ultrasound. Patients completed self-administered UDI-6, IIQ7, FSFI. Patients were followed up at 1, 3, 6, and 12 months after surgery. At each visit, patients underwent clinical examination, evaluation of urinary and sexual symptoms, uroflowmetry with PVR measurement. The complications were classified using both the ICS/IUGA and Clavien–Dindo classification.

Results: 25 female patients were included. They underwent to readjustable TVT (Remeex®). The mean follow up was 93 ± 5 months. Of these 20 patients had detrusor underactivity and 5 had persistent stress urinary incontinence after TOT. The success rate was 95.3%. Two patients underwent a long-term adjustment under local anesthesia 2 years after the surgery. One patient, with detrusor underactivity had acute urinary retention after surgery and she was treated by decreasing the tension of the varitensor. In one patient we removed the device because of suprapubic adiposity the varitensor dislocated and the patient had pain. No events of device infection were recorded. Two patients had fever during hospitalization, but no reoperation was necessary. Bladder injury occurred intraoperatively in 2 cases. We kept the manipulator in place and the bladder catheter for 4 days, without recording infections of the device. De novo urgency was present in 5 (2.5%) patients and was treated with anticholinergics. The maximum flow rate decreased significantly after the procedure (p=0.04); however, the PVR did not change significantly (p=0.07). Only 1 grade III complication according to Clavien–Dindo classification has been reported (vaginal mesh exposure 2AaT3S2).

Interpretation of results: Our results are due to the ability to perform a tension free intervention reserving a readjustment in a portion of patients with complicated SUI.

Conclusions: Remeex is safe in women with SUI and DU, and in women with recurrent SUI, and the presence of the varitensor allows for tension regulation that could not be guaranteed otherwise.

Continence 10S (2024) 101279

doi: <https://doi.org/10.1016/j.cont.2024.101279>

52 - High uterosacral ligaments suspension by Transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES): A pilot study on feasibility, safety and short-term surgical outcomes

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Introduction and aim of the study: High uterosacral ligaments suspension (HUSLS) has been demonstrated to be a safe and durable native tissue repair capable of ensuring effective apical vaginal vault suspension. Transvaginal HUSLS is highly effective in restoring apical defects, but it is associated with an unacceptable risk of ureteral kinking or injury that occur in 1.8%–11% of cases due to limited visualization of the surgical field. Transvaginal natural orifice endoscopic surgery (vNOTES) overcomes this limitation by providing a transvaginal laparoscopic vision of the pelvis, thus potentially allowing safe and effective minimally invasive HUSLS. The aim of this study was to evaluate the feasibility, safety, and short-term surgical outcomes of vNOTES HUSLS in one Italian center.

Materials and methods: We performed a prospective analysis of 14 patients with symptomatic pelvic organ prolapse (POP), enrolled between January 2021 and September 2023. All women underwent vNOTES hysterectomy and adnexal surgery associated with HUSLS. During HUSLS, the ureters were systematically isolated by opening the pelvic peritoneum between the USL and the ureter to avoid kinking during the suspension. We collected perioperative and postoperative data. During the follow-up, we gathered data about pain and patient's satisfaction.

Results: The mean age of patients was 64.2 ± 10.5 years. The mean BMI was 25.4 ± 4.2 kg/m². 57% of patients had an isolated apical defect, 28% had an apical and anterior defect, and 2 patients (14%) had cervical elongation. The mean operative time was 89.5 ± 16 min with a laparoscopic insufflation pressure of 8.2 ± 0.6 mmHg. In 4 (28%) patients, an anterior colporrhaphy was also performed. In one case (7%), a conversion to laparoscopy was necessary due to unexpected severe pelvic adhesions, and in another case, we proceeded with performing sacrospinous suspension due to the impossibility of isolating the USL due to adhesions. We did not observe intra-operative and post-operative complications, particularly bladder, rectal, or ureteral lesions. The mean hospital recovery time was 21.2 ± 4.4 h. The mean VAS pain score was 2.8 ± 2.9 on the day of surgery, 1.5 ± 1.9 at 7 days, and 0.3 ± 0.5 at 6 weeks. The PGI-I score was 2.8 ± 1.3 at 6 weeks. At 60 days, no patient had a POP recurrence.

Interpretation of results: Concerning our results, vNOTES HUSLS appears to be an effective and safe surgery in the correction of POP with a low rate of intra- and postoperative complications.

Conclusions: vNOTES HUSLS is feasible, offering optimal restoration of advanced apical defects with high patient satisfaction. As it allows optimal ureteral visualization and separation from the USL, leading to absence of ureteral kinkings/injuries in this first case series.

Continence 10S (2024) 101280

doi: <https://doi.org/10.1016/j.cont.2024.101280>

53 - Psychotherapy with the use of hypnosis: A specific protocol to treat pain and burning symptoms in patients with chronic pelvic pain

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Introduction and aim of the study: The relationship between chronic pelvic pain (CPP) and patients' experiences may be expressed by the symptoms of pain and burning. A specific psychotherapeutic approach is able to differentiate the origin of the two symptoms. The aim of the study is to evaluate the effectiveness of psychotherapy with the use of hypnosis with a specific intervention protocol on pain and burning symptoms.

Materials and methods: We included all patients with a diagnosis of CPP and undergoing a therapeutic intervention with a psychosomatic approach to differentiate the meaning and origin of the pain and burning symptoms. The study population is characterized by the persistence of pain and/or burning symptoms despite conventional treatments (lifestyle changes, oral therapies, intravesical therapies). Patients underwent 3 standardized tests: Cognitive Behavioral Assessment (CBA), Sexual Evaluation Schedule Assessment Monitoring (SESAMO) and Minnesota Multiphasic Personality Inventory 2 (MMPI-2) and a questionnaire on hypnotic suggestibility. Additionally, Quality of Life Index (QLindex) and Visual Analogic Scale (VAS) score were calculated before and after the treatment. The psychotherapeutic setting lasted six months with weekly sessions which included the use of clinical hypnosis as a specific integrated tool.

Results: We treated 58 patients (43 F and 15 M) with an average age of 36.2 years (21–62). At baseline the mean VAS score was 8.25 (7–10), at the end of therapy 2.52 (0–8). After six months of treatment in 32% of cases (n=18) the VAS score was 0, in 45% between 1 and 4 (n=26) in 23% greater than or equal to 5 (n=14). The average QLindex before Hypnosis was 3.28 (2–5) and then 8.24 (4–10). According to the different domain scores of the tests, patients expressed significant improvements in all areas of daily activities, in the quality of sleep, in social interaction and in the perception of one's own state of well-being.

Interpretation of results: The burning and pain symptoms represent a disabling problem. The consequences of these symptoms cause a high psychological suffering, and repercussions in all aspects of daily life with particular relevance to relational aspects. In the study population the symptoms observed are always related to experiences prior to the onset of the symptoms. The use of clinical hypnosis, intervening in this psychosomatic relationship, has allowed an improvement in the symptoms or their resolution.

Conclusions: Based on the experience conducted, a specific psychotherapy approach with the use of clinical hypnosis appears to be an effective tool in the treatment of pain and burning in subjects diagnosed with CPP. It is therefore possible to combine it with conventional treatments in order to propose a tailored therapy.

Continence 10S (2024) 101281

doi: <https://doi.org/10.1016/j.cont.2024.101281>

54 - Laparoscopic colposacropepy versus Robotic Surgery with the Hugo RAS system: Preliminary data on safety, efficacy, and outcomes

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Introduction and aim of the study: Colposacropepy is proven to be the gold-standard procedure for treating Pelvic Organ Prolapse. Although it is feasible to perform this operation using conventional laparoscopic techniques, robotic-assisted surgery is a new step in the evolution of this procedure and has emerged as a promising alternative to laparoscopy. One of the newest systems recently launched on the market is Hugo RAS (MEDTRONIC Inc, USA), designed to provide greater precision and control during minimally invasive surgery. Some of its features include a remote open surgical console control and four independent manipulator arms which differ from the monolithic structure of the DaVinci.

Materials and methods: We present a retrospective observational study analyzing and comparing safety, feasibility, and outcomes of laparoscopic procedures to robotic assisted surgery performed with the Hugo RAS system. Data of 200 patients with POP were recruited, 100 of them underwent laparoscopic sacrocolpopexy while the remaining went through robot-assisted sacrocolpopexy.

Results: The findings demonstrated that robotic-assisted surgery did not differ from standard laparoscopic sacrocolpopexy in terms of intra and post-operative complications, post-operative pain and length of hospitalization, except for operative time and intraoperative blood loss.

Interpretation of results: Operative time was on average 20 min longer while intraoperative blood loss was lower in the Hugo RAS population (Table 1). Moreover, the median 10-months follow-up demonstrated a statistically significant improvement of objective and subjective outcome in both populations, with a statistically significant POP symptoms resolution and improvement of voiding and storage symptoms.

Conclusions: Robotic assisted surgery procedures performed with the Hugo RAS system appears to be safe and effective in treating symptomatic Pelvic Organ Prolapse. This preliminary insights on this recently released robotic system may be interesting for other centers that may soon introduce this new technology.

Table 1

Peri-operative and post-operative data.

Variables	LPS (n = 100)	Hugo RAS (n = 100)	P-value
OT (min), median (range)	129 (49–235)	150 (76–264)	<.001
EBL (mL), median (range)	50 (10–300)	20 (10–100)	0.01
Time to discharge (days), median (range)	3 (2–5)	3 (2–4)	0.03
Intraoperative complications, N (%)	4 (4)	3(3)	0.417
Postoperative complications, N (%)	6 (6)	5 (5)	0.309
Grade I	3 (50)	2 (40)	
Grade II	2 (33) 1	2 (40)	
Grade IIIa	(17)	0 (-)	N/A
Grade IIIb	0 (-)	1 (20)	N/A
Anatomical cure rate, n (%)	95	93	0.326
Subjective cure rate, n (%)	98	95	0.314

Continence 10S (2024) 101282

doi: <https://doi.org/10.1016/j.cont.2024.101282>

55 - Perineal card as a tool for early identification of increased perineal risk: Differences in referral indications for pelvic floor rehabilitation

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Introduction and aim of the study: Medical history, pregnancy and delivery are risk factors (RF) for pelvic floor dysfunctions. The “Perineal Card” (PC) is a tool for early detection of pelvic floor dysfunctions that allows patients stratification in groups based on RF linked to medical history and delivery data. The PC can place women in 3 groups based on a score: R1 (0–3), R2 (4–7), R3 (>8). Women in the R2 group are referred to early pelvic floor rehabilitation (PFR) while women in the R3 group are additionally referred to a urogynecologist. Our primary aim is to identify through the PC whether the reasons for referral to PFR are mainly based on anamnestic or delivery factors. Our secondary aim is to evaluate the differences in the indications for PFR between primiparous and multiparous.

Materials & methods: All women who with vaginal delivery in 2023 in our center underwent a two-step PC evaluation: at time of admission, to evaluate anamnestic RF, and after delivery, to record obstetric RF. All women with a score >3 were referred to PFR. We included all women who had a vaginal delivery and were subsequently referred for PFR program.

Results: In 2023, there were 737 births, 513 were vaginal. 166 patients (32%) received indication for PFR, of which 69 were nulliparous and 97 multiparous. Of the 166 patients, 6 (4%) were referred for PFRn for both anamnestic and obstetric RF; 101 (61%) for anamnestic RF; 59 (35%) for obstetric RF. Of the nulliparous, 2 (3%) had anamnestic and obstetric RF; 33 (47%) only anamnestic RF; 34 (50%) only obstetric RF. Of the multiparous, 4 (4%) had both anamnestic

and obstetric RF; 68 (70%) had anamnestic RF alone; 25 (26%) had obstetric RF alone. Statistical analysis was performed to evaluate the differences between nulliparous and multiparous in the indication for referral to PFR no statistically significant differences emerged.

Interpretation of results: Our study showed that 32% of patients with vaginal delivery were at greater risk of pelvic floor dysfunction and were referred for PFR. The data is consistent with the prevalence in literature, around 38%. Our study also showed that 70% of the indications were based on anamnestic factors, therefore we could consider administering the PC before the third trimester for earlier referral to PFR. We expected the obstetric factor to prevail in multiparous compared to nulliparous women. Even if there is a difference between the two groups, with prevailing obstetric factors in multiparous women, no statistically significant differences were found between the groups.

Conclusions: Our study shows that the main factor in referral for PFR is the patient's medical history and that there are no statistically significant differences between nulliparous and multiparous.

Continence 10S (2024) 101283

doi: <https://doi.org/10.1016/j.cont.2024.101283>

57 - Urodynamic versus video-urodynamic evaluation in neurogenic bladder: Which is the best diagnostic tool?

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Introduction and aim of the study: Videourodynamics is a diagnostic technique that may be essential for the diagnosis of complex urinary pathologies. However, it is not widely available, because of its costs, RX-ray exposure and the need of specialized urology staff training.

The aim of this study is to compare simple urodynamic examination and videourodynamics in neurological patients, to understand in which cases it contributes to a different diagnosis and a better therapeutic choice.

Materials and methods: We include a consecutive cohort of patients with a neurological pathology undergoing video-urodynamic evaluation. Neurogenic diseases included spinal cord lesions, cerebral trauma, postnatal encephalitis, Guillain Barré syndrome, multiple sclerosis, medullar ischemia post-aortic dissection, post-infective causes, spina bifida. During the examination two different well-trained urologists separately analyzed the simple urodynamic tracks (blind from X-ray evaluation) and the complete video-urodynamic tracks (with X-ray evaluation). The variables analyzed in the data collection were basic pathology, drugs for urinary incontinence, bladder sensibility, bladder compliance, detrusor overactivity, urinary leaks during the examination, urodynamic stress incontinence, obstruction, detrusor underactivity or acontractility, ureteral bladder reflux, cervical/sphincter dyssynergia.

The results obtained from the comparison between simple urodynamics and videourodynamics were analyzed to understand if there is a diagnostic difference between the two tests and therefore whether the videourodynamics provides effective information that can affect the therapeutic choices.

Results: We included 42 patients, 12 patients (28%) females and 30 (72%) males, aged between 20 and 78 years. We found no difference between the diagnosis obtained from videourodynamics and simple urodynamics in 34 cases (80%). 20% of patients (8 patients), however, received a different diagnosis: 2 (4.7%) were diagnosed with ureteral bladder reflux and 6 cases (15.3%) of cervical/sphincter dyssynergia. In these 8 cases the video-urodynamic evaluation modified the interpretations of the urological symptoms and the subsequent treatment and follow-up.

Interpretation of results: According to our results, 20% of the video-urodynamic examinations actually affected the therapeutic choices. In the remaining 80% of cases, it did not lead to different diagnoses, but allowed to exclude anatomical alterations that could represent a danger for the upper urinary tract function.

Conclusions: Compared to simple urodynamic, videourodynamics can lead to a different diagnosis and therapeutic choice in about 20% of the cases in neurogenic patients.

Continence 10S (2024) 101284

doi: <https://doi.org/10.1016/j.cont.2024.101284>

58 - Lower urinary tract symptoms and sexual dysfunction in patients referring at tertiary academic migraine referral center: An observational study

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Introduction and aim of the study: Migraine is a pervasive neurobiological headache disorder that is caused by increased excitability of the central nervous system (CNS). The diagnosis is based on the headache's characteristics and associated symptoms. Migraine without aura is the most common form of migraine in both children and adults, while 15% to 33% of migraineurs experience aura. Aura is a fully reversible, gradual focal neurological phenomenon involving most commonly visual, sensory, speech, and/or motor symptoms. Our study investigated the correlation between migraines, Lower Urinary tract Symptoms (LUTS), and sexual dysfunction.

Materials and methods: We enrolled patients referring at tertiary referral migraine center. The patients were divided in two groups: control group (patients with no prior diagnosis of migraine) and migraine group. The latter was further divided into two groups based on the presence or absence of aura. All patients were investigated with self-administered questionnaires (IPSS, SF-OAB-q, IIEF-5, MSHQ, ICIQ-FLUTS, ICIQ-UI, FSFI, MIDAS). Patients with other neurological disorders, prior pelvic and/or prostatic surgery, in treatment with alpha-blocker and/or antimuscarinic drugs, and aged <18 and >50 y.o. were excluded from the study.

Results: Our study enrolled 215 patients and divided them into Group C (control) and Group M (migraine), with 114 (78 female, 36 male) and 111 (73 female, 38 male) patients, respectively. Group M was divided into Group Ma (migraine with aura) and Group Mw (migraine without aura), composed of 37 and 74 patients, respectively. The mean age was comparable between the Groups (32.3 yo Group C; 31.8 Group M). In Group C, mean IPSS, SF-OAB-q, IIEF-5, MSHQ, ICIQ-FLUTS, FSI, and MIDAS scores were 5.3; 12.4; 23.7; 93.5; 5.2; 26.4 and 3.3 respectively. No significant correlation between migraine and urinary or sexual dysfunction was found.

Statistically significant differences were found in Group M. A correlation was found between the MIDAS score and the SF-OAB-q, IIEF-5, and FSI scores. Higher MIDAS scores were directly correlated with higher SF-OAB-q and lower IIEF-5 and FSI scores. IPSS was also higher in Group M but was not statistically significant (6.2, $p=0.12$). The mean MIDAS score in Group Ma was 15.4 and 16.3 in Group Mw. In Group Ma, the Mean SF-OAB-q, IIEF-5, and FSI scores were 28.1, 17.4, and 19.2, and 26.9, 18.2, and 20.3 in Group Mw, respectively.

Interpretation of results and conclusions: Our study shows that a correlation between urinary symptoms and sexual dysfunction with migraines exists. In particular, a statistically significant correlation was found between Overactive bladder (OAB) and MIDAS score. Furthermore, OAB and sexual dysfunction were found to be more prevalent in patients suffering from migraine with aura.

Continence 10S (2024) 101285

doi: <https://doi.org/10.1016/j.cont.2024.101285>

59 - Characterization of lower urinary tract symptoms in Parkinson's disease Clinical Subtypes

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Introduction and aim of the study: Among autonomic disorders in patients with idiopathic Parkinson's disease (iPD), bladder dysfunction is one of the most common, with a prevalence of 27%–85%. Aims of the study were to evaluate whether LUTS differ among clinical subtypes of iPD and the possible association between urinary disorders and patients' age, disease duration and severity, QoL and non-motors symptoms (such as depression and cognitive involvement).

Materials and methods: This is a single-centre, prospective study involving patients affected by iPD. Subjects were evaluated with the unified Parkinson's disease rating scale (UPDRS) motor section part III and Hoehn-Yahr (H&Y) scale to assess motor symptoms and the stage of disease severity. Cognitive function was assessed using Mini Mental State examination (MMSE) and Montreal Cognitive Assessment (MOCA). Patients were divided into tremor-dominant type (TDT), akinetic-rigid type (ART), and mixed type (MXT) PD subgroups using part III of the Unified Parkinson's Disease Rating Scale. Urinary symptoms were evaluated with 3-day voiding diary, uroflowmetry and the Incontinence Quality of Life questionnaires (I-QoL); psychological status by "Hamilton Anxiety Scale" (HAM-A) and "Hamilton Depression Scale" (HAM-D). Stata® 17.0 was used as software for statistical analysis.

Results: 52 patients (39M, 13F) were enrolled; mean(\pm SD) age: 66.5 \pm 9.6 yrs. Mean(\pm SD) values of UPDRS and H&Y stage were 27.7 \pm 10.3 and 2.4 \pm 0.7, respectively. All patients complained about at least one LUTS: 92% had urgency (53% of this had urge urinary incontinence), 83% had increased urinary frequency and 77% had nocturia. Disease duration was positively related to an increase in urinary frequency ($r=0.37$, $p=0.06$), nocturia ($r=0.29$, $p=0.03$) and negatively related to Qmax ($r=-0.33$, $p=0.01$). The rate of urinary frequency increased with the increase of HAM-D scale values ($r=0.49$, $p<0.001$). The number of nocturia episodes was expression of more severe disease, as expressed by UPDRS ($r=0.37$, $p<0.001$) and worse scores in HAM-A ($r=0.33$, $p=0.01$) and HAM-D scales ($r=0.28$, $p=0.04$). A correlation was observed between urinary frequency and HAM-A scores ($r=0.33$, $p=0.01$). No significant difference was observed between the subgroups (TDT, ART, MXT).

Interpretation of results: There are few studies correlating PD clinical aspects with autonomic features. Some researchers have observed that 93% of LUTS correlates with the extent of motor symptoms. Our findings suggest that the presence of LUTS correlated with the severity of motor impairment and non-motor symptoms.

Conclusions: Our results suggest that LUTS correlate with the severity of motor and non-motor impairment. To our knowledge, this study is one of the few showing a positive correlation between urinary incontinence with the cognitive involvement possibly reflecting the known role of the decline in nigrostriatal dopaminergic function.

Continence 10S (2024) 101286

doi: <https://doi.org/10.1016/j.cont.2024.101286>

60 - Spina bifida young patient's sexuality: An unmet challenge for patients and clinicians

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Aim of the study: The study aims to investigate the impact of spina bifida (SB) on young patients' sexuality. SB is a neural tube defect with a wide range of neurological sequelae, including motor, sensibility, and continence dysfunction. The Impact of this condition on sexual life may vary from irrelevant to prominent.

Materials and methods: an anonymous questionnaire divided into four sections (demographic data with self-awareness, sexual activity with related problems, and sexual education, and eventual pregnancies), addressed to female and male patients older than 13 years old registered to regional and national SB associations, was uploaded through a link on the association's websites.

Results: 114 patients answered the questionnaire, 83 F and 31 M. 72 patients were older than 30 years old, 76% of F (57/83) and 50% of M (15/31). In the female group, 57% (48/83) were sexually active, with 83% (40/83) asserting that their sexual experience was significantly influenced by SB. In the male group, 55% (17/31) were sexually active, with 45% (14/31) asserting that their experience was significantly influenced by SB. Problems reported during sex were reduced sensibility (8%, 7/83 F and 26%, 8/31 M) and continence (15%, 12/83 F and 13%, 4/31 M). However, 85% of all patients felt pleasure during sex. 50% of responders (42/83 F and 15/31 M) affirmed to have an appropriate sexual education. 39% (32/83) of F and 24% (7/31) of M used contraceptives, especially condoms. 84% of males affirmed having erections (26/31). 56% (46/83) of females have not approached a gynecologist. However, 71% (22/31) of males have an andrologist.

Discussion: SB patients are not less interested in sexual life, contrary to what society and medical professionals tend to believe. Incontinence was found to be a highly discouraging parameter as it induces shame with consequent decrease in libido and sexual pleasure. However, sensibility seems to be preserved in both groups. SB is a condition which needs deep understanding regarding the consequences in everyday life, including sexuality, and there is no consensus described so far as such regarding sexual education for SB patients. Unexpected results emerged from the data about female and male's clinician consultations: only 44% of female took counsel from a gynecologist. However, 71% of M have an andrologist. Awareness regarding safe sexual practices such as the use of condoms and other contraceptives must be given in order to improve the quality of life of people suffering from this condition and to reduce the incidence of sexually transmitted infections and unplanned pregnancies.

Conclusions: Although the inequality of samples analyzed, sexuality is an often overlooked topic in clinical practice about this particular population; our study demonstrates how both patients and their clinicians do not understand and adequately apply the need for specific sex education, based on the peculiarities and needs of these patients.

Continenza 10S (2024) 101287

doi: <https://doi.org/10.1016/j.cont.2024.101287>

61 - Role of pelvis posture in pelvic floor re-education during childhood

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Introduction and aim of the study: In adult pelvis anteversion is a predisposing factor for urinary incontinence (UI) because intrabdominal forces burden the anterior pelvic floor (PF). There are no studies conducted in children, and furthermore never the influence of pelvic position on pelvic floor re-education in urotherapy program in children has been investigated.

Materials and methods: We enrolled 27 children (24 F-3 M; average age: 9.5yrs) affected by urinary incontinence (UI), recurrent urinary tract infections (UTI) and dysfunctional voiding (DV) evaluated in our Pediatric Urology outpatient clinic. All patients have been treated with 3 session of PF re-education, also using animated biofeedback, in a standard module of 1 h for session for 15 days. During the first session a pelvic position in standing was evaluated, an external pubococcygeus (PC) test was performed and repeated during the last session.

Results: Anteversion of pelvis was present in 16/27 patients (59%): 10 affected by UI (62%), 5 with UTI (31%) and 1 with DV (1%). Neutral position of pelvis was present in 10/27 children (37%): 4 affected by UI (40%) and 6 affected by UTI (60%). Only 1 patient (3%), affected by UTI presented a pelvis retroversion. During last session, in pelvic anteversion group PC test was increased by 1.06 points (+70%) and 8/16 (50%) patient reported an improvement of symptoms, in pelvic neutral group PC increased by 0.6 points (+43%) and symptoms improved in 3/10 children (30%); PC test remained stable in child with pelvis in retroversion without an improvement of symptomatology.

Interpretation of results: According to literature, anteverted pelvis is correlated with increased UI (62%) in pediatric population too. Children with pelvis in anteversion seem to respond better to re-education, with a 70% increase in PC test. In our mind this could be explained by the fact that in anteversion position abdominal muscles and gluteus are relaxed and can work as agonist muscles during PF recruitment. Opposite situation is present in retroversion position when glutes and abdominal muscles are contracts. In neutral position there may be partial recruitment of the above muscles with an antagonistic action on the PF. The small sample size, particularly in the group with retroverted pelvic position it is an important limit of this study. We hope to increase the study group and confirm our preliminary findings with RX images and electromyographic evaluation of the abdominal, back, and pelvic floor muscles.

Conclusions: Our preliminary study suggests the importance of pelvic position in PF re-education in pediatric population. If our data will be confirmed, the PF re-education could be associated with a postural re-education to improve treatment's result, where maybe also alternative activities as yoga or pilates could be useful to introduce for motivating adolescents.

Continenza 10S (2024) 101288

doi: <https://doi.org/10.1016/j.cont.2024.101288>

62 - Urological management of pediatric patients with Multiple Sclerosis

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Introduction and aim of the study: Multiple Sclerosis (MS) is increasing in pediatric population. Different symptoms at the presentation, as in adults, have been described. In pediatric and adolescents the first manifestations are usually neurological, sometimes overlapping with an acute neurological pathology. Urological data in pediatric population with are scantily reported. We present our experience with pediatric MS urological manifestation and their management.

Materials and methods: A retrospective electronic medical chart review was performed on all children with MS diagnosed according to McDonald's criteria from January 2019 to January 2024. All MS < 18 years old with urological symptoms were included. We collected demographic data, clinical history (comprehensive of urological manifestation, exams and management) and Magnetic Resonance localization of demyelinating lesions.

Results: Five patients (4 F, 1 M) were enrolled. Median age at time of MS diagnosis was 15,4 years old. Urinary symptoms, were: urinary incontinence in four patients and urinary retention in one. The urological onset was: at time of MS diagnosis in 1 patient, one year later in 2 and 3 years later in 1.

One patient was surgically treated for myelomeningocele at birth and urinary symptoms gotten worse after MS diagnosis. Invasive urodynamic was performed in 3 patients, with the finding of overactive bladder in 1 case and hypocontractile bladder with dyssynergia in 2 cases. One patient underwent non-invasive urodynamic evaluation due to lack of collaboration and it showed signs of dyssynergia with altered flow and pathological post-voiding residual. One patient is scheduled for urodynamic exam up to now. Regarding the management of symptoms, 2 patients needed clean intermittent catheterization (CIC) in association with oxybutynin and intradetrusor onabotulinum Toxin A injection, 1 patient needed CIC and 1 patient needed oxybutynin therapy associated with Percutaneous Tibial Nerve Stimulation.

Localization of demyelinating lesions does not seem to be correlated with the onset of urological manifestations.

Interpretation of results: First manifestation of MS in pediatric population is the neurological one but, later also urological symptoms appear. As in adult, urological manifestation could be reconducted to an overactive bladder or underactive bladder pattern. As urologic symptoms appear to occur or worsen after the clinical and radiological diagnosis of MS, we believe that a Pediatric Urology evaluation from the time of diagnosis is recommended. In this way, patients can be managed even before the onset of symptoms or upper urinary tract deterioration, possibly avoiding acute urological manifestations.

Conclusions: We believe that a promptly multidisciplinary team evaluation, including neurologist, physical rehabilitation doctor, pediatric urologist, urotherapist and psychologist, after MS diagnosis is important to improve the urological outcome.

Continence 10S (2024) 101289

doi: <https://doi.org/10.1016/j.cont.2024.101289>

63 - Battery depletion of implanted pulse generator in Sacral Neuromodulation: How do we notice it? And what could we do to ensure the continuity of care?

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Introduction and aim of the study: To assess the reasons that lead to the diagnosis of implanted pulse generator (IPG) battery exhaustion in Sacral Neuromodulation (SNM) therapy.

Materials and methods: We examined, through the analysis of medical records and telephone interviews, the reasons that led to the diagnosis of battery depletion in all patients undergoing device replacement from January 2021 to January 2023 at our SNM Tertiary Referral Center. Data related to the initial diagnosis and the waiting time for IPG replacement were also collected. The Chi-Square Test was used to test the strength of the association between the initial diagnosis and symptoms recurrence, if present.

Results: We retrospectively enrolled 52 patients. Mean waiting time for IPG replacement was 133 days. The reasons leading to the diagnosis of battery depletion were the recurrence of symptoms previously under control with SNM (35 patients, 67.3%), the self-diagnosis by the patient using the Smart Programmer® at home (12 patients, 23.1%) and the clinician diagnosis during routine outpatient visits (5 patients, 9.6%). Among all patients with good symptoms control at the diagnosis, 8 patients (47.1%) experienced a recurrence of symptoms while awaiting the intervention, and only 9 patients (52.9%) replaced the stimulator without losing clinical efficacy. No clinically significant differences between initial diagnosis and symptoms recurrence were observed ($p = 0.574$).

Interpretation of results: It is highly important to train the patient to regularly check the device so that they can identify the lower battery status early. Additionally, the patient should have all the tools to be able to contact the Center and the referring doctors who can perform an outpatient evaluation promptly.

Conclusions: The diagnosis of an exhausted stimulator is often secondary to the recurrence of symptoms, which can frequently manifest even while awaiting the replacement intervention.

Continence 10S (2024) 101290

doi: <https://doi.org/10.1016/j.cont.2024.101290>

64 - Progress of machine-learning algorithm to predict the risk of incontinence after robot-assisted radical prostatectomy: XGBoost

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Introduction and aim of the study: After robot-assisted radical prostatectomy (RARP) for prostate cancer it is necessary to schedule an intensive postoperative rehabilitation protocol to improve functional outcomes. The aim of the study was to train a machine learning algorithm to discriminate the patient's risk of postoperative incontinence based on their perioperative features collected via MAIA telemedicine platform.

Materials and methods: Patients underwent RARP from April 2022 to January 2023 were enrolled and divided into two groups for rehabilitation and postoperative monitoring: 140 patients underwent standard postoperative recovery program, while 87 were assisted by MAIA platform. Perioperative, pathological, and functional variables were collected. The analysis was set to build a machine learning model to predict the risk of postoperative incontinence.

Results: Our study enrolled 227 consecutive and prospective patients who underwent RARP. No significant differences were recorded in terms of perioperative, pathological variables and continence recovery between two groups. Concerning potency recovery, the rate of patients with erection resulted statistically higher in the MAIA rehabilitation group at 1 and 3 months; these results were confirmed after stratification per nerve sparing technique only for the patients who underwent to full nerve sparing RARP. After identifying XGBoost as the best machine-learning model among those analyzed by the benchmark analysis, SHAP values (weight variables) were identified to predict the individual patient's risk of incontinence (higher or lower risk class). The model, once the variables are recorded, assigns the patient to a high-risk class of developing postoperative incontinence (when the value obtained is < 0.67 which is considered the threshold value) or low (when the value obtained is > 0.67) (Fig. 1).

Interpretation of results: The researchers employed XGBoost as the best machine-learning model. Using weight variables (SHAP values), the model predicted individual patient risk for incontinence, categorizing them into high or low-risk classes. The threshold value for this classification was set at 0.67, with patients falling below considered high-risk for developing postoperative incontinence and those above considered low-risk.

Conclusion: With the use of the MAIA platform for telerehabilitation and telemonitoring and the integration of the XGBoost machine learning model into the platform, patients can receive a tailored rehabilitation treatment to improve early recovery of functional outcomes after RARP.

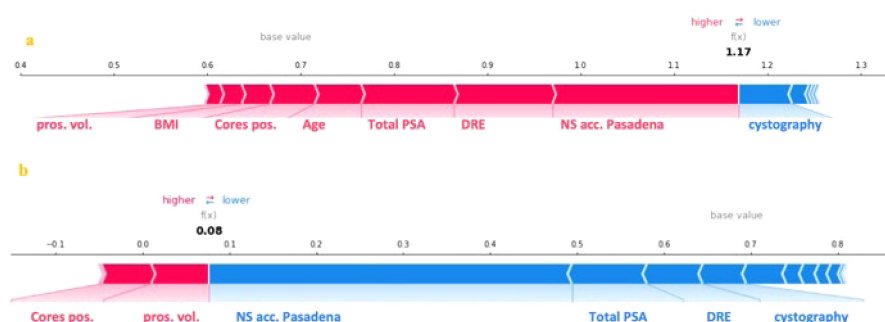


Fig. 1. Plots of SHAP force.

Continece 10S (2024) 101291

doi: <https://doi.org/10.1016/j.cont.2024.101291>

65 - Early continence recovery after robot-assisted radical prostatectomy: A multicenter analysis on the role of prostatic shape

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Introduction and aim of the study: Several predictors of urinary incontinence after robot-assisted radical prostatectomy (RARP) have been described, including preoperative multiparametric prostatic magnetic resonance imaging (mpMRI) of prostatic apex shape. Aim of the study was to confirm these findings on a large cohort analysis.

Materials and methods: Data of patients who underwent RARP among 10 referral robotic centers between Jan-2017 and Dec-2022 were retrospectively analyzed. Patients were stratified into four groups based on the mpMRI prostatic apex shape. Group A (prostatic apex overlapping the membranous urethra anteriorly and posteriorly), Group B and C (overlap of the prostatic apex of the anterior or posterior membranous urethra, respectively) and Group D (no overlap of the prostatic apex over the membranous urethra). Pre-, intra- and post-operative variables were compared. Continence recovery was defined as ≤ 1 safety pad/day. The cumulative incidence functions for continence recovery were estimated by the Kaplan-Meier method and compared between groups by the log-rank test. The adjusted and unadjusted hazard ratios (HRs) were estimated using multivariable Cox regression.

Results: 918 patients who underwent RARP were classified as Group A ($n = 256$), Group B ($n = 237$), Group C ($n = 154$) and Group D ($n = 271$). At baseline, statistically significant differences were found in Charlson's Comorbidity Index (CCI) ($p = 0.03$), Body Mass Index (BMI) ($p = 0.009$), prostatic urethral length ($p = 0.002$) and membranous urethral length ($p = 0.01$). The continence recovery median time was 4 months for Group A+B+C (95% CI 4–4) and 3 months for Group D (95% CI 3–3). Group D showed a significantly earlier continence recovery after RARP respect to all the other shapes presenting any forms of overlapping (HR = 1.2, 95% CI 1.03–1.39, $p = 0.017$). The estimated HR remained unchanged after adjusting by age, CCI, BMI, prostate volume, bladder neck sparing, nerve

sparing and presence of median lobe (HR = 1.17, 95% CI 1.01–1.37, $p = 0.038$). The multivariable Cox models showed an association with BMI (HR = 0.97, 95% CI 0.95–0.99, $p = 0.022$), bladder neck sparing (HR = 1.46, 95% CI 1.26–1.69, $p < 0.001$), and nerve sparing (HR = 1.25, 95% CI 1.09–1.43, $p = 0.001$).

Interpretation of results: Statistical data show that prostatic apex shape has a significant impact on time-to-continence after RARP, in particular Group D showed a significantly earlier continence recovery after RARP respect to all the other prostatic shapes.

Conclusions: Our multicenter study confirmed that prostatic apex shape has a significant impact on time-to-continence after RARP. Further prospective studies are warranted to better define the role of preoperative mpMRI anatomic features.

Continence 10S (2024) 101292

doi: <https://doi.org/10.1016/j.cont.2024.101292>

66 - Efficacy outcomes and adherence to MAIA digital platform for telemonitoring and telerehabilitation in patients undergoing robot-assisted radical prostatectomy

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Introduction and aim of the study: The aim of the study was to test the efficacy of new MAIA telemedicine platform for postoperative telemonitoring and telerehabilitation in patients undergoing Robot-Assisted Radical Prostatectomy (RARP).

Materials and methods: Patients underwent RARP from April 2022 to January 2023 were enrolled into two groups for rehabilitation: group A underwent standard postoperative recovery program, while group B were assisted by MAIA platform during the first 30 days after the intervention. Perioperative, pathological, and functional variables were collected. Adherence to telerehabilitation protocols was evaluated through the app. Lack of feedback or negative feedback for the execution of rehabilitation protocols prompted further investigation through televisit assessments. The efficacy of the telerehabilitation protocol was assessed focusing on continence and potency recovery in comparison with control group via PAD test, International Index of Erectile Function (IIEF-5), International Prostatic Symptoms Score (IPSS) and International Score of Incontinence (ISI) questionnaire performance. Univariate and multivariate logistic regression analysis were built to identify independent predictive factors of functional outcomes at one and three months.

Results: 227 consecutive patients were enrolled in the study: 140 patients in group A and 87 patients in group B. No significant differences were recorded in terms of perioperative, pathological variables and continence recovery between two groups. The rate of patients with erections was statistically higher in the group B at 1 month (44.8%) and 3 months (57.4%) than in group A (34.2 and 47.8 respectively at 1 and 3 months) ($p = 0.03$; $p = 0.02$). The variables identified like a predictive factors of potency recovery at 1-month and 3-months at univariate logistic regression corroborated at multivariable regression analysis were only the nerve sparing approach ($p = 0.03$; $p = 0.04$) and use of the MAIA™ platform ($p = 0.01$; $p = 0.02$). About the adherence, 4.5% patients reported that they could not perform their rehabilitation exercises while 12.6% did not take oral PDE5-i. Thanks to prompt televisit all patients resolved their problem.

Interpretation of results: The rate of patients with erections was statistically higher in patients assisted by MAIA platform who underwent to nerve sparing RARP. The variables identified like a predictive factors of potency recovery were only the nerve sparing approach and use of the MAIA™ platform.

Conclusion: With the use of the MAIA™ platform for telerehabilitation and telemonitoring patients can receive a tailored rehabilitation treatment to improve early potency recovery after RARP.

Continence 10S (2024) 101293

doi: <https://doi.org/10.1016/j.cont.2024.101293>

67 - ATOMS implant for the treatment of postoperative male stress urinary incontinence: Complications and its management in a large cohort of patients

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Introduction and aim of the study: To assess the complications rate after ATOMS implantation and its post-operative management.

Materials and methods: We retrospectively collected data of male patients who underwent ATOMS device implantation from 2002 to 2023. We analyzed pre- and post-operative clinical data from the patients' records. We identified peri-operative (<1 month) and post-operative (>1 month) complications, management, rate of explants and any association to pre-operative variables. Results were analyzed with the program Jamovi (Version 1.6). Contingency tables and Pearson's Chi square test were applied.

Results: We included 221 patients with median age 73 years (36–85). Overall 115/221 (52%) patients experienced complications.

78 patients (35%) experienced perioperative complications, all of them of mild severity: scrotal oedema (26%), scrotal pain (5.4%), dysuria (0.5%), temporary urinary retention resolved with cushion deflate (2.3%) and wound dehiscence (0.9%).

98 patients (44%) experienced postoperative complications, as indicated in Table 1. Most of them were low-grade and self-limiting. Out of all patients, 27 (12%) needed a second surgery to manage the complications. 9 patients (33.3%) had a device removal and a second ATOMS implantation. The median timing of the second surgery was 14 (IQR 7–28) months after the implantation.

The type of prostate surgery (RARP, RALP, RRP, TURP, surgical adenectomy, HIFU) was not correlated to peri-operative ($p = 0.51$) or post-operative ($p = 0.33$) complications. Previous radiotherapy was related to post-operative complications ($p = 0.015$), but not to peri-operative ($p = 0.15$). Diabetes was not related neither to peri-operative complications ($p = 0.1$) nor to post-operative ($p = 0.21$).

Interpretation of results: Our study shows an overall complications rate of 52%. Most complications were mild (such as scrotal oedema or local pain). Only 12% of patients had high grade complications which required a secondary surgery.

Literature data show a complication rate from 7 to 33%, a device infection rate from 2.7 to 6.2% and an explant rate from 0 to 19%.

Only radiotherapy can be considered a predictive factor of postoperative complications.

Conclusions: The overall incidence of severe complication after ATOMS implant appears to be low (12%) and the quality of radiotreated tissues may expose to a high risk of complications.

Table 1
Postoperative complications.

	Clavien–Dindo grade	N=	%=
Scrotal oedema	I	36	16%
Deflating for dysuria	I	1	0.5%
Deflating urinary retention	I	11	5%
Scrotal pain	II	9	4.1%
Complicated UTI	II	5	2.3%
Dehiscence of the surgical wound	II	5	2.3%
Port surgical revision	IIIa	10	4.5%
Device removal for pain	IIIa	5	2.3%
Port removal	IIIa	5	2.3%
Device removal + re-implantation	IIIa	9	4.1%
Device removal for infection or sepsis	IIIa	2	0.9%
Spontaneous deflating	IIIa	1	0.5%

Continence 10S (2024) 101294

doi: <https://doi.org/10.1016/j.cont.2024.101294>

68 - Role of Body Shape and metabolic syndrome in symptoms persistence in patients undergoing transurethral resection of the prostate

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Introduction and aim of the study: Recently few studies have evaluated the role of body shape (ABSI) in prostatic diseases. The aim of our study was to evaluate the role of ABSI in patients undergoing transurethral resection of the prostate.

Materials and methods: From 2015 onward, a consecutive series of patients undergoing TURP were prospectively enrolled. Medical history, physical examination, dedicated questionnaires were recorded. International prostate symptom score was used to evaluate lower urinary tract symptoms. Metabolic syndrome was evaluated according to the ATP III criteria. Body shape was calculated as ABSI (A Body Shape Index) = $1000 \cdot \text{WC} \cdot \text{Wt}^{-2/3} \cdot \text{Ht}^{5/6}$. Persistent LUTS at three months were defined as IPSS ≥ 8 ; persistent storage LUTS as sIPSS ≥ 3 , persistent voiding LUTS as vIPSS ≥ 5 and persistent nocturia as ≥ 2 episodes.

Results: Two hundred and one patients were enrolled with a median age of 70 years (interquartile range: 65/73). Median ABSI was 6.7. After TURP persistent LUTS were recorded in 26/201 (13%) of the patients. More specifically persistent voiding in 14/201 (7%), persistent storage in 32/201 (16%) and persistent nocturia in 36/201 (18%) of the patients. On multivariate logistic regression analysis ABSI (OR=2.89; $p < 0.05$) was a predictor of persistent LUTS. On multivariate logistic regression analysis ABSI (OR=2.05; $p < 0.05$) and number of metabolic syndrome components (OR=1.38; $p < 0.05$) were independent predictors of persistent storage LUTS. No predictors of persistent voiding LUTS and persistent nocturia were recorded. BMI and Waist alone did not predict persistent LUTS.

Interpretation of results: In our single-center study, MetS and ABSI increased the risk of persistent storage LUTS after TURP in patients with LUTS-BPE.

Conclusions: Although these results should be confirmed, and the pathophysiology is yet to be completely understood, counseling patients with metabolic abnormalities about the risk of postoperative persistent storage LUTS is warranted.

	Persistent LUTS		Persistent sLUTS	
	OR(95% CI)	p	OR(95% CI)	p
Age	1,02 (0,95-1,09)	0,562	1,08 (1,02-1,15)	0,006
MetS components	0,98 (0,64-1,50)	0,941	1,38 (1,11-1,03)	0,002
ABSI	2,89 (1,27-6,68)	0,012	2,05 (1,21-4,14)	0,003

Predictors of persistent LUTS and storage LUTS.

Continence 10S (2024) 101295

doi: <https://doi.org/10.1016/j.cont.2024.101295>

69 - Water vapor therapy (Rezūm®) for symptomatic BPH: A safe and effective treatment for patients with gland over 80 mL. 1 year results from an Italian monocentric prospective study

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Introduction and aim of the study: Current guidelines recommend Rezūm® (Boston Scientific Corporation, Marlborough, MA) water vapor thermal ablation for prostates <80 ml and little data exist describing outcomes in patients with prostates ≥80 ml. The aim of this study was to evaluate the efficacy and safety of Rezūm therapy in patients with large-volume prostates from a cohort of BPH patients enrolled in a real-world study

Materials and methods: Data from consecutive patients with moderate to severe LUTS undergoing Rezūm therapy at a single center between June 2022 to June 2023 were prospectively collected. Institutional ethics board approval was obtained (N.11566/2022). The preoperative evaluation included history, clinical examination, uroflowmetry and post-void residual volume (PVR). The International Prostate Symptom Score (IPSS), the International Index of Erectile Function (IIEF-5) and questions 9 and 10 to assess ejaculatory dysfunction were recorded. Election criteria were age > 18 years, no prior interventions for BPH, IPSS ≥13, peak urinary flow rate (Qmax) ≤15 mL/s with minimum voided volume of ≥125 mL, post-void residual ≤250 mL, prostate volume >30 and ≤200cc. All patients were informed that Rezūm for prostates > 80 ml is not recommended by AUA and EAU guidelines

Results: 121 patients (mean age, 67.78 ± 8.31) were enrolled for analysis. 70 patients (58%) had a prostate volume ≤ 80 mL and were included in Small Prostate sub – group work (SP), 51 patients (42%) had a prostate volume ≥ 80 mL and were included in Large Prostate sub – group work (LP). 100 patients (83%) had a median lobe (62 (87.3%) in SP sub-group and 38 (76%) in LP sub-group). Preoperatively, 19 patients (15.7%) had indwelling catheter (10 (2.6%) in LP sub-group). Median follow-up study was 5 months (range 6–12). LP sub-group analysis highlighted an IPSS significant reduction from baseline by 22%, 15%, 11% at 3, 6, and 12 months, respectively. There were noticed also significant improvement in IPSS QoL scores by 63%, 13%, 9%, respectively. Q max improved significantly from baseline by 81%, 18%, 11% at 3, 6 and 12 months respectively. PVR values also improved from baseline by 45%, 13%, 5% respectively. Of the 10 (20%) patients who had indwelling catheter, all of them were catheter free after procedure. No cases of de novo erectile dysfunction and anejaculation rate of 3.1% was reported.

Interpretation of results: Our study adds consistent data to the growing body of evidence supporting the effectiveness and safety of Rezūm therapy in patients with BPH-related LUTS and a prostate gland > 80 mL.

Conclusions: Rezūm treatment showed optimal functional outcomes in patients with large-sized prostates.

Further studies were warranted to confirm long-term outcomes and explore the possibility of expanding Rezūm's inclusion criteria.

Continence 10S (2024) 101296

doi: <https://doi.org/10.1016/j.cont.2024.101296>

70 - Comparative evaluation of perioperative and functional outcomes between aquablation and robot-assisted simple prostatectomy for benign prostatic hyperplasia

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Introduction and aim of the study: The aim of this study was to compare perioperative and functional outcomes between robot-assisted simple prostatectomy with urethral preservation (usRASP) and Aquablation (AB).

Materials and methods: We retrospectively extracted from our prospectively maintained databases all patients with at least 12-month follow-up who underwent AB or usRASP between 02/2017 and 02/2022. Demographics, perioperative data and complications (according to Clavien–Dindo system) were assessed. Functional outcomes were recorded at 1, 3, 6 and 12 months with evaluation of maximum flow rate (Qmax), post void residue (PVR), International Prostate Symptom Score (IPSS), QoL-IPSS, Male Sexual Health Questionnaire for ejaculatory dysfunction (MSHQ-EjD). The trifecta definition was defined as the contemporary presence of: (a) no postoperative complications > Clavien–Dindo 2 within the first postoperative month; (b) 1-month postoperative Qmax >15 ml/s and (c) antegrade ejaculation at 3-month evaluation.

Results: 65 usRASP and 75 AB were extracted. No differences were found in perioperative data between the two groups, except for mean (SD) operative time that was found to be shorter in the AB group (64.6 (14.4) vs 111.9 (23.6) min; $p < 0.05$). No intraoperative complication occurred in both groups. Early postoperative complication rate was lower, even if not statistically significant, in the AB cohort (10.7% vs 15.4%; $p = 0.366$); 1 (1.5%) and 2 (2.7%) complications Clavien–Dindo > 2 were recorded in the usRASP and AB cohort, respectively. Postoperative antegrade ejaculation was preserved in 96.0% of patients underwent AB, whilst in 76.9% of usRASP group ($p < 0.05$). 1-month Qmax was found comparable between the groups (mean 23.4 (1.2) ml/s in usRASP vs 20.4 (2.2) ml/sec in AB; $p > 0.05$). 3 months median Qmax was 19.2 (2.4) and 22.5 (2.1) ml, and median (IQR) IPSS score was 4 (2–5) and 5 (1–5) points for AB and RASP group respectively ($p > 0.05$); median (IQR) IPSS-QoL score (1 (0–1) vs 2 (0–2); $p < 0.05$) and mean (SD) PVR (19.1 (10.1) vs 26.4 (11.2) ml; $p = 0.07$) results were found to be better in usRASP group. Overall, Trifecta rate was significantly higher in AB cohort (94.3% vs 75.4%; $p < 0.05$).

Interpretation of results: AB and usRASP demonstrated to have almost the same result on the 1 and 3 months after intervention Qmax and on the post-operative symptoms. Median IPSS-QoL score and PVR results were found to be better in usRASP group, while Trifecta rate was significantly higher in AB cohort.

Conclusions: AB and usRASP are safe and effective treatments for symptomatic BPH. usRASP has shown slightly better urinary functional outcomes whilst, AB seems to be more effective in antegrade ejaculation preservation.

Continence 10S (2024) 101297

doi: <https://doi.org/10.1016/j.cont.2024.101297>

2F - The role of telenursing in neurogenic bowel dysfunction management: Preliminary results

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Introduction and aim of the study: In recent years, the role of telemedicine and medical innovation has become crucial, particularly highlighted by the rapid advancements and widespread adoption necessitated by the COVID-19 pandemic. This acceleration led to significant breakthroughs and expanded applications in medicine. Telenursing, a key component of this digital transformation, is extensively explored in the literature, with a focus on managing chronic diseases and offering promising interventions in neurological dysfunctions, especially for patients with spinal cord injuries. This study aims to evaluate the feasibility and efficacy of telenursing in the specific context of neurogenic bowel dysfunction (NBD) management, while also assessing patient satisfaction derived from these telehealth interventions.

Materials and methods: We enrolled patients diagnosed with NBD. Our telenursing intervention (30 min session) was aimed at the following objectives: providing education on proper dietary habits, advising on bowel care routines, managing medications, and monitoring symptoms. For patients undergoing transanal irrigation (TAI), the goals included: providing instruction on the proper technique and addressing any concerns or questions about confidently and safely performing TAI at home. To monitor bowel function, the Mentor Tool and SF Qualiveen scales were administered.

Results: Sixty-six patients were recruited (70% male; 51 with spinal cord injury, 15 with multiple sclerosis). Of these, 41% used transanal irrigation and 59% used laxatives. According to the Mentor Tool scale, 45% had good management (green), 33% had suboptimal management (yellow), and 22% had poor management (red). On the SF Qualiveen scale: 53% experienced moderate, 29% mild, and 18% severe impact on life quality. 80% of participants favored continuing telenursing, which all nurses found effective for NBD follow-up.

Interpretation of results: The telenursing service identifies 55% of patients needing better bowel management, offering advice or early medical check-ups as needed. It enables prompt responses to patient queries and effective counseling, reducing unnecessary medical visits. Although long-term outcomes are pending, as the pilot began three months ago, initial results are promising for both patients and healthcare professionals.

Conclusions: Telenursing could aid in enhancing self-care, ensuring continuity of care, and improving treatment adherence. This, in turn, leads to improved patient quality of life and reduced healthcare utilization, effectively assisting in managing chronic diseases. Telenursing is a significant tool for patient health and wellness, and the authors hope that this model, supported by multidisciplinary teams, can be successfully adopted by other centers.

Continence 10S (2024) 101298

doi: <https://doi.org/10.1016/j.cont.2024.101298>

4F - Tailored physiotherapy for male Chronic Pelvic Pain Syndrome: A case study on evidence-based physiotherapeutic interventions

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Introduction and aim of the study/Introduzione e scopo dello studio: Chronic Pelvic Pain Syndrome (CPPS) is a common clinical presentation among men. The condition often remains unrecognized or underestimated due to the variability in its incidence and therapeutic efficacy. Historically, therapeutic strategies for men have been extrapolated from female-centric studies, which may not account for the complexities inherent in gender-specific presentations. It is imperative to tailor treatments to the patient's age, gender, and personal values. This case report aims to assess the complexities involved in treating CPPS in men and to introduce a multimodal physiotherapy approach that aligns with Evidence-Based Practice.

Materials and methods/Materiali e metodi: A 43-year-old male presented at our clinic with persistent pelvic pain, exacerbated by prolonged sitting. Without a definitive medical diagnosis, the patient experienced chronic pain in the anal, testicular, and suprapubic regions, impeding daily and physical activities. Assessments were conducted in alignment with the International Continence Society (ICS) criteria, including the Central Sensitization Inventory (CSI) and the Pain Catastrophizing Scale (PCS). Pelvic floor palpation pain was evaluated using the Numerical Pain Rating Scale (NRPS). An innovative rehabilitation strategy was implemented, comprising therapeutic interventions focused on modulating central pain mechanisms and integrating the patient's preferences, involving external manual therapy techniques, 'Hands Off' treatment, behavioral education, pain neuroscience education, and therapeutic exercise.

Results/Risultati: Following a series of ten physiotherapy sessions, the NRPS was reduced by 4 points and marked improvements on the CSI and PCS assessments. The patient was able to resume daily life activities and sports, ceasing the use of maladaptive strategies at work.

Interpretation of results/Discussione: The 'Hands Off' treatment paradigm offers a sustainable alternative to traditional rectal treatments, paralleling the long-term benefits of centrally acting medications. Such active treatment modalities promote patient self-efficacy, engaging patients as active agents in their clinical progress and rehabilitation.

Conclusions/Conclusioni: The manual therapy alone may not be sufficient to reduce pain but should be considered in support of other techniques. In the present study, a patient-centered approach along with therapeutic exercise and modern neuroscience seems to be a promising option in reducing pain. Research

on the effectiveness of physiotherapy for CPPS in males remains limited. Future research should focus on developing gender-specific physiotherapy techniques to enhance the management of CPPS in the male population.

Continence 10S (2024) 101299

doi: <https://doi.org/10.1016/j.cont.2024.101299>

5F - The role of the physical therapist in the treatment of symptoms of Endometriosis: A case report, combination of pelvic perineal and visceral manual therapy

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Introduction and aim of the study/Introduzione e scopo dello studio: Endometriosis is a chronic inflammatory disease characterized by the presence of endometrium-like tissue outside the uterus, which affects women predominantly in the fertile period.

This case report aims to present the abdomino-pelvis-perineal manual therapy, understood as the set of myofascial, articular and visceral intra and extra cavitory techniques, such as a valid complementary strategy to medical pharmacological treatment to improve pain, biopsychosocial well-being and quality of life of patients with symptomatic endometriosis.

Materials and methods/Materiali e metodi: A 35-year-old woman, sporty, complains of dysmenorrhea due to menarche, characterized by cramping pain in the lower abdominal area of high intensity (NPRS = 8/10) to the point of forcing her to take Ibuprofen for the management of daily activities, work and sports, and profound dyspareunia (NPRS = 6/10) on penetrative intercourse that results in reduction in pleasure, orgasm intensity, sexual satisfaction, and perceived quality of life (SF - 36 = 92; FSFI = 55). The intervention focused on the use of manual techniques, within a multimodal program, aimed at reducing spasm pelvic floor muscle disease, rigidity of fascial, visceral and articular structures such as uterosacral ligaments, large ligament of the uterus, uterine cervix, sacrococcygeal and sacroiliac, found in evaluation, with the aim of inducing a neurophysiological effect on pain, improve organ function and consequently implement psychophysical and social well-being of the patient.

Results/Risultati: At the end of the therapeutic pathway, which included 8 rehabilitation sessions distributed in a 5-month period, the patient reports a significant reduction in the intensity of the pain symptoms both during the menstrual cycle (NPRS = 3/10 without taking Ibuprofen, 0/10 with drug intake), and penetration (NPRS = 1/10), with consequent increase in the level of well-being and quality of life of couples, work and social perceived (SF - 36 = 100; FSFI = 93).

Interpretation of results/Discussion: Still few and of poor methodological quality are the studies on the efficacy of manual neuromusculoskeletal and visceral therapy for the treatment of symptomatic endometriosis, therefore the use of manual therapy in the context of multimodal therapy may be underestimated.

Conclusions/Conclusioni: We can say that the use of a multimodal rehabilitation program personalized, tailored to the patient's symptoms signs and needs and based on intracavitary, extracavitary, extracavitary, musculoskeletal and visceral manipulation manual therapy has produced significant positive effects on dyspareunia, dysmenorrhoea and psychosocial well-being of the patient.

Continence 10S (2024) 101300

doi: <https://doi.org/10.1016/j.cont.2024.101300>

6F - The role of the physical therapist in taking care of the patient with Lichen Sclerosus: Case report from diagnosis to treatment

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Introduction and aim of the study/Introduzione e scopo dello studio: Lichen Sclerosus is a chronic inflammatory disease that predominantly that involves the anogenital areas. The most frequent symptoms include: itching, local irritation, skin fragility, dyspareunia, genital pain and stenosis. Long-term inflammation can lead to changes in the external genitalia, such as fusion of the labia minora with the labia majora, burial of the clitoris, and narrowing of the introitus. All this causes urinary and sexual disorders, seriously compromising the patients' quality of life. Currently, there is no single (medical or surgical) strategy that can be recommended for LS treatment.

In the literature, regarding the management of patients affected by Lichen, we find studies that aim to demonstrate the effectiveness of pharmacological treatment and regenerative surgery.

The aim of this case report is to evaluate the effectiveness of the rehabilitation treatment, in association with the regenerative surgery treatment and an initial pharmacological treatment, in improving the symptoms and quality of life of the patient diagnosed with Lichen, with follow-up up in the long term.

Materials and methods/Materiali e metodi: The patient in this case report, a 35-year-old woman diagnosed with Lichen Sclerosus, has been cared for from 2017 until the current date. The management includes both tissue regeneration treatments with LP-PRP, performed by a specialist in regenerative surgery; and rehabilitation treatments performed by a physiotherapist specialized in pelvic-perineal rehabilitation. The patient underwent various rehabilitation treatments at decreasing rates, as time passed and the symptoms improved. Initially, the symptoms reported by the patient included burning and itching in the vulvar area (NPRS:6), inability to have vaginal intercourse, with FSFI Female Sexual Function Index: 25/36 and DLQI Dermatology Life Quality Index: 14/30.

Results/Risultati: The patient reports an improvement in symptoms and reports having intercourse, in the absence of burning. The previous rating scales are administered, with the following results: FSFI: 35/36, DLQI: 2/30.

Interpretation of results/Discussione: What we could observe from one case was the patient's need to combine her surgical course with a rehabilitation and behavioral course that could help her in daily life, relationships, and symptom management.

Conclusions/Conclusioni: This case report suggests that the rehabilitation treatment strategy combined with a regenerative surgical treatment and an initial pharmacological approach appears to be a winning weapon for the long-term management of patients affected by Lichen, for the control of symptoms and for the restoration of lost functionality.

Continence 10S (2024) 101301

doi: <https://doi.org/10.1016/j.cont.2024.101301>

7F - To contract or not to contract: Should we use pelvic floor muscle exercises in the treatment of dyspareunia?

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Introduction and aim of the study/Introduzione e scopo dello studio: Dyspareunia is a common condition of the chronic pelvic pain that affect sexual activity. Within the physiotherapy community and on social media platforms, there is a prevailing belief that relaxation techniques should be prioritized for managing pain associated with dyspareunia, while exercises targeting the pelvic floor muscles (PFM) should be avoided. This research evaluates the existing literature to explore the role of PFM exercises in the treatment of dyspareunia, aiming to discern both the benefits and limitations of this treatment modality. Furthermore, it investigates the rationale behind the recommendation to avoid PFM exercises in cases of dyspareunia.

Materials and methods/Materiali e metodi: Studies included in this review were derived from searches conducted for the purpose of other reviews performed by the authors of this paper conducted in January 2023 and updated in December 2023. Additionally, complementary searches were carried out in PubMed in December 2023, utilizing a combination of keywords associated with dyspareunia, physiotherapy, and pelvic floor exercises. We also searched reference lists of previous review articles in this area.

Results/Risultati: Depending on the specific type of dyspareunia and treatment objectives, PFM exercises may enhance muscle contractility and relaxation, boost strength and endurance, and improve blood flow. These exercises can also improve the condition and elasticity of vaginal mucosal tissue. Furthermore, they may foster greater bodily awareness, motor acuity and sensation. Recent systematic review on PFMT showed effectiveness of PFM exercises, also in terms of improvements in sexual pain.

Interpretation of results/Discussione: The evidence presented indicates that PFM exercises can be effective in treating dyspareunia. Their efficacy is particularly notable when the exercises are performed thoughtfully and under supervision, emphasizing precise contraction, relaxation, and awareness, rather than being carried out automatically without consideration. Therefore, the objective of PFM exercises in addressing pain in dyspareunia may encompass not only traditional strengthening but also fostering awareness, coordination, and enhanced relaxation.

Conclusions/Conclusioni: Based on the presented data, PFM exercises may have multiple applications in the treatment of dyspareunia. It appears essential to consider them as a multifaceted intervention that can be adapted in various forms and for diverse objectives, which extend beyond simple strengthening. PFM exercises have been widely incorporated in research studies, which suggest positive outcomes and the safety of the interventions implemented, contrary to the prevailing beliefs.

Continence 10S (2024) 101302

doi: <https://doi.org/10.1016/j.cont.2024.101302>

8F - How the presence of a proctor specialist in the operating room impacts the experience of the scrub nurse during the implantation of the sacral neuromodulator

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Introduction: The surgical procedure for sacral neuromodulator implantation involves placing a small device, typically near the sacral nerves, to modulate or stimulate these nerves electrically. Neuromodulation can help regulate bladder and bowel function, alleviating symptoms of urinary incontinence, overactive bladder, and specific pelvic pain conditions.

The proctor specialist emerges as an essential figure in supporting the surgical team and ensuring the optimization of the implantation. This study aimed to investigate the experience of the instrument nurse who approaches sacral neurostimulation as a novice under the guidance of the specialist proctor.

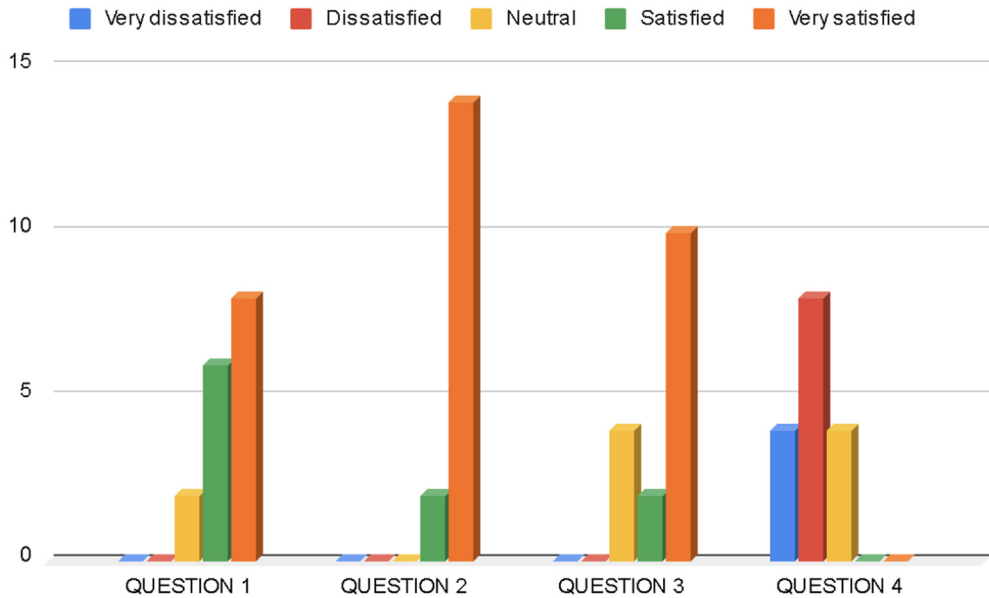
Materials and Methods: The analysis involved 16 instrument nurses from a reference hospital who approached sacral neurostimulator implantation as novices, supported by a proctor specialist during the initial surgical sessions. Each participating scrub nurse completed a questionnaire to record their approval regarding the "novel" sacral neuromodulator implantation procedure, satisfaction with the presence of the proctor specialist in the operating room, any lingering concerns or fears despite the proctor's presence, and the potential impact of the proctor's presence on the successful outcome of the implantation. Responses were provided on a Likert scale, with any additional suggestions recorded in an open-ended format.

Results: Scrub nurses appreciated the introduction of the new procedure. They valued the presence of the proctor specialist in the operating room, perceiving this figure as providing additional safety during the intervention. Lingering concerns were only marginally present, and the proctor's presence was seen as positively impacting the procedure's success. Nurses suggested the opportunity for frontal training sessions to acquire helpful information about neuromodulator implantation before their involvement in the operating room.

Discussion: Current scientific literature has not highlighted the proctor specialist’s impact on the scrub nurse’s performance. Our data indicate that the proctor’s presence during sacral neurostimulator implantation positively influences the nurse’s technical and emotional management of the procedure. Participation in frontal lessons would allow nursing staff to acquire fundamental theoretical knowledge to understand the device and its implantation better.

Conclusions: According to our data, the presence of the proctor specialist in the operating room has positive repercussions on nursing staff approaching sacral neurostimulator implantation as novice (see Table 1).

Table 1



- Question 1**
- How much do you like the introduction of sacral neurostimulation as a new surgical approach to urinary incontinence?
- Question 2**
- How much did you like knowing that a proctor specialist would be present in the OR where a neurostimulator would be positioned?
- Question 3**
- Do you think that the presence of the proctor specialist could impact the results or the success of the procedure?
- Question 4**
- Do you still have any concerns or fears in managing the sacral neurostimulator despite the presence of an external expert?

Continence 10S (2024) 101303
doi: <https://doi.org/10.1016/j.cont.2024.101303>

9F - Diagnostic-therapeutic path in a patient suffering from fecal incontinence following anterior rectal resection for adenocarcinoma

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Introduction and aim of the study: Pelvic Floor Rehabilitation (PFR) is an evolving technique that involves various professional figures in different care settings. There are no guidelines defining appropriateness, inclusion and exclusion criteria, and good practice. Starting from a clinical case we focus the discussion on inclusion criteria and prognostic factors favourable to the success of the treatment.

Materials and methods: Our clinical case is an 80-year-old man, referred from a surgery department for incontinence of the rectal ampulla (verified with barium enema), after laparoscopic anterior resection of the rectum for adenocarcinoma and protective Brooke ileostomy (08/2022). The patient also had mild chronic kidney failure, which worsened after surgery. At pelvic floor assessment (01/2023): normal perineal sensitivity, non-elicitable anal and bulbocavernosus reflexes (BCR), no voluntary contraction of the EAS. These data excluded the possibility of treatment, but the strong motivation of the patient and the pressure of the surgeons, due to the progressive worsening of the renal function, led us to verify the presence of a possible neurological damage with a neurophysiological investigation of the pelvic floor which confirmed the absence of voluntary recruitment of EAS, but a normal sensitivity and a BCR present, normal in latency, although reduced in amplitude. Then, the patient underwent a cycle of 10 PFR sessions initially focused on awareness with manual treatment and manometric probes, and only when EAS recruitment appeared, muscle strengthening was added.

Results: At the end of treatment (03/2023): PC test 2/4 with endurance of approx. 10” and early perception of defecation stimulus, also because of anterior pressure due to BPH.

The patient was referred back to surgery department and underwent loop ileostomy closure with mechanical side-to-side isoperistaltic anastomosis (04/28/2023) with good recovery of defecatory function, progressively improving at 4 and 8-month follow-ups, also thanks to increased stool consistency.

Interpretation of results: The diagnostic and therapeutic process was supported by multiprofessional work and available diagnostic possibilities, which oriented the therapeutic choice to the desired results.

The rehabilitation treatment should not be just a reinforcing one, or limited to biofeedback, it is important to work on awareness with manual intervention by the therapist.

Conclusions: We want to underline the importance of the differential diagnosis: in the rehabilitation approach, besides any functional diagnosis, it is necessary to investigate any possible neurological pathologies independently from the diagnosis the patient is referred with. Critical evaluation is also important to avoid therapeutic failures.

Continence 10S (2024) 101304

doi: <https://doi.org/10.1016/j.cont.2024.101304>

10F - Postoperative pelvic floor intensive rehabilitation after minimally invasive radical prostatectomy: A step further towards an earlier urinary continence

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Introduction and aim of the study/Introduzione e scopo dello studio: Different surgical techniques have been described with the aim of improving functional results after minimally invasive radical prostatectomy. One of the main criticisms for an early functional recovery consists in the post catheter removal phase, when patients often wait for weeks before starting a rehabilitation program. In this study, we report our results in terms of early UC achievement at discharge from the hospital after an intensive pelvic floor rehabilitation program in patients submitted to laparoscopic radical prostatectomy for prostate cancer.

Materials and methods/Materiali e metodi: In our Institution, patients submitted to LRP for PCa underwent a tailored pelvic floor rehabilitation program during hospital stay, performed by a dedicated physiotherapist. After catheter removal, firstly, urinary continence was assessed and subsequently, patients were transferred to our Rehabilitation Unit (RU) to start the training. Every day, patients were asked to complete standardized physical exercises for pelvic floor rehabilitation in a dedicated gym, guided by the physiotherapist. At the end of the program, urinary continence was reassessed and, in case of suboptimal results, patients were discharged from the hospital with a personalized outpatient physiotherapy program. We collected perioperative and postoperative data. Urinary leakage was measured in grams (g) after catheter removal, at discharge from RU and after 90 days from surgery.

Results/Risultati: From January 2022 to December 2022, we performed 94 LRPs. Median (IQR) age was 70 (64–73) years and BMI 28 (27–30). 10 (10.6%) patients suffered from metabolic syndrome. 62 (65.9%) patients had clinical ISUP 1 and 32 (34.0%) cases had clinical ISUP 2 PCa. Full NS dissection was performed in 32 (34.0%) cases, partial NS in 31 (32.9%), minimal NS in 3 (3.2%) patients, no NS in 28 (29.8%) cases. Median (IQR) hospital stay was 6 (6–7) days and catheterization time was 5 (5–5) days. Mean (SD) urinary leakage at catheter removal was 288 (408) g with a median (IQR) of 1 pad (1–3) used. After a median (IQR) of 4 (4–5) days spent at our RU, 85 (90.4%) patients were continent (0 pads used), whilst 3 patients still needed 1 pad per day for urinary leakage of 50, 70 and 100 g per day. These patients were submitted to postoperative physiotherapy, observing an overall UC recovery of 100% (0 pad used) at 90 days after surgical intervention.

Conclusions/Conclusioni Despite the surgical technique used for performing minimally invasive radical prostatectomy, an early intensive rehabilitation program during hospital stay has shown to significantly increase urinary continence at discharge from the hospital.

Continence 10S (2024) 101305

doi: <https://doi.org/10.1016/j.cont.2024.101305>

11F - Addressing vulvodynia with acupuncture: Healing Touch of the Past

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Introduction and aim of the study: Vulvodynia, characterized by chronic vulvar pain without an identifiable cause, remains a significant clinical challenge for many healthcare professionals. While traditional treatments like medication, pelvic rehabilitation, and cognitive-behavioral therapy show mixed results, emerging evidence indicates acupuncture as a potentially effective alternative. This study aims to evaluate acupuncture's efficacy in managing vulvodynia pain symptoms.

Materials and methods: We enrolled in the study women with vulvodynia attending our clinic for perineal dysfunctions. The patients underwent weekly acupuncture sessions for a total of 10 sessions. The primary outcome was pain control, assessed using the NRS scale and the DN4 scale; the secondary outcome was the improvement of quality of life, evaluated using the SF36. These scales were administered at T0 (first session) and T1 (tenth session).

Results: We enrolled 10 women with vulvodynia, mean age 36 years old. Time elapsed since vulvodynia diagnosis averaged 3 years.

The mean scores at T0 were 8 for the NRS and 7 for the DN4, while at T1, they were 3 for the NRS and 4 for the DN4; the standard deviation was 2 (both T0 and T1). In the Student's t-test, the average improvement in scores on both the NRS and DN4 scales was statistically significant. For the NRS scale, the p -value was approximately 3.77×10^{-5} , and for the DN4 scale, the p -value was around 0.0145.

The average improvement on the SF36 scale was 40 points.

All the women enrolled in the study, during the acupuncture cycle, altered their medication intake (primarily pregabalin, amitriptyline, tapentadol, diazepam). 7 out of 10 reduced the dosage of the analgesic drugs they were taking, and 3 discontinued pharmacological analgesic therapy.

Interpretation of results: Acupuncture treatment improves pain and quality of life in patients with vulvodynia, with the following highlights: (1) reduced side effects; (2) easy applicability, allowing sessions to begin even while patients are on waiting lists for physiotherapeutic rehabilitation or other therapies; (3) reduced medication use; (4) high patient appreciation of the treatment (5) significant improvement in quality of life.

Conclusions: In alignment with existing literature, this study validates that acupuncture is a viable and safe method for effectively managing pain in patients with vulvodynia. The authors emphasize that acupuncture, despite its proven efficacy, remains underrecognized in the vulvodynia treatment paradigm. It holds potential as both an independent therapy and a complementary component in a multimodal treatment approach.

Continence 10S (2024) 101306

doi: <https://doi.org/10.1016/j.cont.2024.101306>

12F - Hypnotic communication in women with vulvodynia, dyspareunia and vaginismus in pelvic floor rehabilitation

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Introduction and aim of the study: This study explores the application of hypnotic communication in pelvic floor rehabilitation, with particular emphasis on the following conditions: dyspareunia, vaginismus, and vulvodynia. These conditions significantly impact the sexual and overall quality of life of patients. The primary objective of this study was to examine the effectiveness of utilizing hypnotic communication as a component in the rehabilitation of these pelvic disorders.

Materials and methods: The study sample consists of 30 participants, women aged between 19 and 64 years, all afflicted with at least one of the pelvic disorders under analysis. The research was conducted through a case-study-based approach, involving data collection before and after treatment. The therapeutic approach involved sessions of hypnotic communication integrated with pelvic floor rehabilitation techniques.

Results: Analysis of data collected before and after treatment revealed significantly positive results. A notable improvement in pelvic pain perception was observed, with a significant reduction in scores on the VAS scale. Additionally, scores obtained in the Female Sexual Function Index (FSFI) questionnaire increased, indicating an enhancement in participants' sexual quality of life. Analysis of the satisfaction questionnaire revealed a general appreciation for the hypnotic communication-based therapeutic approach.

Interpretation of results: These results suggest that the therapeutic approach based on hypnotic communication can be an effective option in managing pelvic disorders. Hypnosis appears to significantly contribute to pelvic pain relief and sexual function improvement. However, it is important to bear in mind that further research is required to confirm these results and the persistence of the benefits of the therapeutic approach.

Conclusions: This study has contributed to a deeper understanding of the application of hypnotic communication in managing pelvic disorders. The therapeutic approach has proven to be highly effective in enhancing the quality of life of participants by reducing pain and improving sexual function. Implementing hypnotic communication into clinical practice in pelvic floor rehabilitation could offer new perspectives that may significantly enhance the well-being of women affected by these conditions.

Continence 10S (2024) 101307

doi: <https://doi.org/10.1016/j.cont.2024.101307>
