Urology Research Review™

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Issue 60 - 2023

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Abbreviations used in this issue:

COVID-19 = coronavirus disease 2019; **CT** = computed tomography; **EAU** = European Association of Urology; **ED** = erectile dysfunction; **HR** = hazard ratio; **LOS** = length of stay; **NIH** = National Institute of Health; **NSAID** = nonsteroidal anti-inflammatory drug; **OR** = odds ratio; **PcA** = prostate cancer; **TURB** = transurethral resection of bladder tumour; **TURP** = transurethral resection of the prostate.

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Welcome to Issue 60 of Urology Research Review.

In a US study we discover that an institutional protocol for no opioid prescriptions at discharge after surgery resulted in lower median and mean opioid doses in all procedure types, with the exception of kidney procedures, without compromising pain control. According to Japanese researchers, nobiletin and tangeretin flavonoids derived from the peel of *Citrus depressa* had little effect on nocturnal bladder capacity versus placebo, but did reduce night-time void frequency in patients with nocturia. Other topics covered in this issue include treatment decision regret in long-term survivors after radical prostatectomy, a national audit of quality of care for renal colic, EAU guideline adherence across Europe, low-intensity shockwave treatment for erectile dysfunction, stent-associated symptoms following ureteroscopy for urinary stones, and gender-affirming hormone therapy and orgasm function.

We hope you find our selection of articles for this review interesting and welcome your feedback.

Kind Regards,

Professor Eric Chung

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Implementation and assessment of no opioid prescription strategy at discharge after major urologic cancer surgery

Authors: Mian BM et al.

Summary: This US, single-centre cohort study assessed a protocol for eliminating post-discharge opioid prescriptions in 647 patients (mean age 63.6 years; 73.9% male) after major urologic cancer surgery who were allocated to control (usual opioids; n = 194), lead-in (reduced opioids; n = 95), and NOPIOIDS (no opioid prescriptions; n = 358). The rate of opioid prescriptions at discharge was 80.9% in controls, 57.9% in the lead-in group, and 2.2% in the NOPIOIDS groups ($p < 0.001$); median number of tablets prescribed was 14, 4, and 0 per patient ($p < 0.001$), with the exception of NOPIOIDS patients undergoing kidney procedures where the mean dose was 0.5 tablets. Patient-reported pain surveys from 72.6% of NOPIOIDS patients, revealed low pain scores (mean 2.5) and high satisfaction scores (mean 86.6).

Comment: In recent years, there have been dire warnings on the opioid pandemic in terms of increased abuse and prescribing of opioids and the number of opioid-related deaths. Many institutions recognise their opioid overuse, especially in post-operative settings, and are implementing new multimodal opioid-sparing analgesic methods with varying degrees of success. In this study, an institutional protocol for no opioid prescriptions at discharge after surgery was shown to lower median and mean opioid doses in all procedure types, with the exception of kidney procedures with lower pain scores and high satisfaction scores and importantly, no increase in post-operative complications. Various opioid-free methods and prescription protocols, along with improved education and awareness regarding safe opioid use are critical for managing this serious opioid disorder, which is rapidly becoming a socioeconomic problem.

Reference: JAMA Surg. 2023;158(4):378-385

Abstract

Effectiveness and safety of a mixture of nobiletin and tangeretin in nocturia patients: A randomized, placebo-controlled, double-blind, crossover study

Authors: Ito H et al.

Summary: Japanese researchers conducted a randomised, placebo-controlled, double-blind, crossover study to examine the use of nobiletin and tangeretin (NoT) flavonoids derived from the peel of *Citrus depressa* in 40 patients (13 female; mean age 73 years) with nocturia. Only 36 patients completed the study, but no adverse events related to treatment occurred. NoT had little effect on nocturnal bladder capacity versus placebo, but did reduce night-time void frequency (-0.5 vs placebo; p = 0.040). Nocturnal polyuria index declined from baseline to the end of active treatment (-2.8%; p = 0.048).

Comment: Nocturia or nocturnal voiding dysfunction has a high unmet medical need since it is clinically difficult to cure. Recently, there has been growing evidence that nocturia is associated with the impairment of circadian rhythm. NoT have been identified as clock amplitude enhancers that modulate its circadian function. In this randomised, placebo-controlled, double-blind, crossover study, NoT significantly changed night-time frequency by -0.5 voids and nocturnal polyuria index (-2.8%) although the actual impact on nocturnal bladder capacity was minimal. Given the likely multifactorial nature of nocturia and the fact that the effects of NoT vary, it is possible that some populations may derive benefits from NoT while others may not, and the presence of smaller bladder capacity and lower serum creatinine could be useful predictors of success. Because NoT has been found to be safe, even in older adults, and is a commercially available supplement, the improvement noted in this pilot study may promote further, larger clinical trials with higher doses and longer evaluation periods.

Reference: J Clin Med. 2023;12(8):2757
Abstract

The efficacy of Flogofilm® in the treatment of chronic bacterial prostatitis as an adjuvant to antibiotic therapy: A randomized prospective trial

Authors: Barone B et al.

Summary: In this Italian randomised controlled trial, researchers assessed the efficacy of fluoroquinolones with or without the anti-biofilm preparation Flogofilm® containing Flogomicina® (N-acetylcysteine [NAC], plus bromelain, ascorbic acid, *Ribes nigrum*, resveratrol, and pelargonium) in 96 patients with chronic bacterial prostatitis. International Prostate Symptom Score (IPSS) without versus with Flogofilm® was 8.28 versus 9.88 at baseline, 6.45 versus 4.31 (p = 0.020) at 1 month, 5.32 versus 3.20 (p = 0.042) at 3 months and 4.91 versus 2.63 (p = 0.005) at 6 months. NIH-Chronic Prostatitis Symptom Index (NIH-CPSI) total scores were 16.15 versus 13.10 (p < 0.0001), 13.47 versus 9.65 (p < 0.0001) and 9.83 versus 5.51 (p < 0.0001).

Comment: Although the management of bacterial prostatitis involves the use of appropriate spectrum antibiotics, which represent the first choice of treatment, a multimodal approach encompassing antibiotics, an α-adrenoreceptor antagonist, and nutraceutical products to improve the efficacy of the chosen antimicrobial regimen is often required. Flogofilm® is a phytotherapeutic compound with various active ingredients with a unique mechanism of action and a low side-effect profile. In this randomised controlled trial, the use of combination antibiotics plus Flogofilm® tablets was associated with a significant improvement in pain, urinary symptoms (IPSS score) and quality of life (NIH-CPSI total score). These positive changes could be due to the antibacterial, anti-inflammatory and antioxidant properties of these phytotherapeutic agents as well as the potential to modulate the composition and metabolite production of local microbiota within the bacterial reservoir. Nonetheless, it must be acknowledged that the clinically significant improvement observed in patients treated with Flogofilm® may vary depending on the underlying aetiology of chronic prostatitis and whether this agent achieves satisfactory drug concentration within the prostatic tissue.

Reference: J Clin Med. 2023;12(8):2784
Abstract

Changes in urologic cancer surgical volume and length of stay during the COVID-19 pandemic in Pennsylvania

Authors: Chun B et al.

Summary: This US cohort study aimed to describe patterns in major urologic cancer surgery volumes and post-operative length of stay during the COVID-19 pandemic based on 24,001 patients (mean age 63.1 years; 15% female, 83% White patients, 75% living in urban areas) with kidney cancer, prostate cancer, or bladder cancer receiving radical nephrectomy (n = 4896), partial nephrectomy (n = 3508), radical prostatectomy (n = 13,327), and radical cystectomy (n = 2270). The baseline rate of 168 partial nephrectomies per quarter in quarter 1 (Q1) of 2020 decreased to 137 surgeries per quarter in Q2 and Q3, the radical prostatectomy rate declined from 644 surgeries per quarter to 527 surgeries per quarter in Q2 and Q3. The likelihood of radical nephrectomy (OR 1.00; 95% CI 0.78-1.28), partial nephrectomy (OR 0.99; 95% CI 0.77-1.27), radical prostatectomy (OR 0.85; 95% CI 0.22-3.22), or radical cystectomy (OR 0.69; 95% CI 0.31-1.53) was unchanged. Length of stay decreased by a mean of 0.7 days (95% CI -1.2 to -0.2) for partial nephrectomy cases during the pandemic.

Comment: Faced with the COVID-19 pandemic, judicious response efforts and timely surgical services in a resource-restricted environment have been adopted and surgeons often postponed non-urgent elective surgical procedures based on national guidelines. Based on the Pennsylvania Health Care Cost Containment Council database, this study found that major urologic cancer surgery, especially that of partial nephrectomy and radical prostatectomy surgical volume were decreased during the peak waves of COVID-19 pandemic. The COVID-19 pandemic has been associated with exacerbating existing healthcare disparities, particularly in telehealth and cancer screening, and several proposed tiered guidelines have been published to facilitate the triage of urologic cancer surgical procedures. Central to these guidelines, there is a consensus on surgical procedures with urgent indications that should not be postponed ensuring timely cancer surgery. The decrease in surgical volume during peak disruption is not only expected to have repercussions in the acute phase but also into the recovery phase of the pandemic as a build-up of deferred surgical procedures mounts and will take some time to clear the backlog.

Reference: JAMA Netw Open 2023;6(4):e239848
Abstract

Prevalence and morbidity of local treatment-related side effects in metastatic prostate cancer patients

Authors: Sentana-Lledo D et al.

Summary: This single-centre, cross-sectional study compared prevalence of local treatment-related adverse events in patients with metastatic recurrence and those in remission and the extent of medical oncologists' efforts to address this morbidity. Median total Expanded Prostate Cancer Index Clinical Practice (EPIC-CP) scores were higher in the metastatic cohort versus the localised cohort (18 vs 10.0) ($p < 0.001$), driven mostly by worsening symptoms in the sexual (8.0 vs 6.0; $p < 0.001$) and hormonal domains (2.0 vs 0.0; $p < 0.001$). There were also differences in the urinary irritation/obstruction (3.0 vs 1.0; $p < 0.001$) and bowel domains (1.0 vs 0.0; $p < 0.001$). There was a trend towards higher scores with radiotherapy as primary treatment. Medical oncologists rarely changed clinical management in response to local symptoms.

Comment: Significant proportions of metastatic prostate cancer will continue to experience local or systemic symptoms, in addition to the expected quality of life (QoL) impacts of systemic therapy. In this single-site, cross-sectional study, prostate cancer patients with metastatic recurrence suffer from a higher burden of localised treatment-related symptoms compared with patients in remission as evidenced by higher total EPIC-CP scores and higher worsened sexual, urinary and bowel symptoms, with primary radiotherapy associated with more prevalent toxicity than radical prostatectomy. The higher prevalence and morbidity in patients that received primary radiotherapy rather than radical prostatectomy is not surprising given that 70% of the patients relapsing after radical prostatectomy had also received salvage radiotherapy. Urologists and radiation oncologists have a key role in addressing these lingering post-treatment symptoms, complementing the medical oncologist's role in managing systemic therapies. Further studies should focus on elucidating the clinical and patient factors that portend long-term morbidity at the time of metastatic recurrence to better inform treatment decisions and safeguard patient QoL.

Reference: Urol Oncol. 2023;41(4):204.e1-204.e6
Abstract

Oncological and safety profiles in patients undergoing simultaneous transurethral resection (TUR) of bladder tumour and TUR of the prostate

Authors: Laukhtina E et al.

Summary: International researchers sought to identify oncological impacts and adverse events of simultaneous transurethral resection of bladder tumour (TURBT; n = 581) and transurethral resection of the prostate (TURP; n = 181) for obstructive benign prostatic hyperplasia (BPH) in 762 men. Length of stay and complication rates including major complications (Clavien-Dindo Grade ≥III) did not differ between TURBT-alone and TURBT plus TURP recipients, although the latter resulted in longer operative time ($p < 0.001$). Over a median follow-up of 44 months, there were more recurrences in the TURBT-alone (47%) than TURBT plus TURP recipients (47% vs 28%; $p < 0.001$). There were more recurrences at the bladder neck/prostatic fossa in TURBT-alone recipients (55% vs 3%; $p < 0.001$). TURBT plus TURP procedures was associated with improved recurrence-free survival (RFS; HR 0.39; 95% CI 0.29-0.53; $p < 0.001$), but not progression-free survival (PFS; HR 1.63, 95% CI 0.90–2.98; $p = 0.11$). In a propensity score matched cohort of 254 patients, simultaneous TURBT plus TURP showed improved RFS (HR 0.33; 95% CI 0.22-0.49; $p < 0.001$), as did a subgroup with recurrence risk factors (n = 380; HR 0.41; 95% CI 0.28-0.62; $p < 0.001$).

Comment: Men diagnosed with new or recurrent bladder cancer may have concurrent benign prostatic enlargement and lower urinary tract symptoms. Although both problems could be treated simultaneously, many urologists are reluctant to do so due to the risk of tumour seeding. Recent meta-analyses have found no increased risk of bladder cancer recurrence or progression when performing simultaneous TURBT and TURP. In this multicentre study, simultaneous TURBT and TURP have a comparable length of stay as well as complication rates to the TURBT-alone group, and furthermore, seems to be an oncologically safe option that may even improve RFS, even in patients with recurrence risk factors, by potentially preventing disease recurrence at the bladder neck and in the prostatic fossa. The likely explanation for the beneficial effect of TURP for symptomatic benign prostatic enlargement during TURBT may be due to low post-void residual volume following de-obstruction, preventing prolonged urothelial exposure to carcinogens in the residual urine. Furthermore, the decrease in the rate of recurrence at the bladder neck and in the prostatic fossa may suggest the removal of precancerous lesions or even dysplasia/carcinoma *in situ*. What would be interesting is to evaluate if it is safe for patients with combined TURBT and TURP to receive intravesical therapy even in the absence of bladder or prostatic capsular perforation.

Reference: BJU Int. 2023;131(5):571-580
Abstract

Treatment decision regret in long-term survivors after radical prostatectomy: A longitudinal study

Authors: Meissner VH et al.

Summary: This multicentre survey-based study examined the prevalence, course, and predictors of longitudinal decision regret in 1003 long-term prostate cancer survivors registered with the German Familial PCa Database who had received radical prostatectomy. Decision regret 7 years (2007) and 19 years (2020) after prostatectomy increased from (9.0% in 2007 to 12% in 2020; $p = 0.009$). Factors associated with decision regret in 2020 were favourable localised prostate cancer (OR 1.97; 95% CI 1.05-3.68), decision regret in 2007 (OR 6.38; 95% CI 3.55-11.47), and a higher depression score (OR 1.37; 95% CI 1.03-1.83). Less decision regret was associated with shared decision-making (OR 0.55; 95% CI 0.33-0.93).

Comment: Decision regret constitutes a complex, negative emotion whereby a patient reflects upon their present situation and considers whether a different choice would have resulted in a better outcome. Decision regret following treatment for localised prostate cancer has been explored in the literature, with regret increasing with time and in patients who experienced more severe urinary and sexual symptoms. In this multicentre study, decision regret increased over time with patients having favourable localised prostate cancer, lack of shared decision-making, and higher depression score reporting higher decision regret. The relationship between decision regret and treatment modality is often complex and difficult to be defined. Adequate informed consent and full disclosure of potential adverse events of prostate cancer treatment are important in patient understanding and participation in their treatment decision-making and overall treatment satisfaction. Urologists should be mindful of the challenges faced by prostate cancer patients and shared decision-making should replace paternalism in clinical consultation.

Reference: BJU Int. 2023;131(5):623-630
Abstract

Independent commentary by Professor Eric Chung

Professor Eric Chung is a consultant urological surgeon at the Andro Urology Centre for Sexual, Urinary and Reproductive Excellence and holds academic appointments at the University of Queensland (Brisbane) and Macquarie University Hospital (Sydney). He is the Leader of male LUTS and Past Chair of Andrology section in the Urological Society of Australia and New Zealand (USANZ), the Secretary-General for the Asia Pacific Society of Sexual Medicine (APSSM) and Chairperson for the Prostate Cancer Survivorship committee at the International Consultation on Sexual Medicine (ICSM). He has been invited to speak and operate at many international meetings and has authored more than 100 peer-reviewed papers and book chapters.

Enabling national improvement in quality of care for renal colic

Authors: Finch W et al.

Summary: The British Association of Urological Surgeons (BAUS) conducted a clinical audit of ureteric stone care pathways based on all patients (n = 2192; 70% male, median age 46 years) presenting as an emergency in 107 hospitals in England with reference to national quality standards. In 70% of patients, initial management was conservative treatment. When surgical intervention was required, the primary treatments were shockwave lithotripsy (34%) and ureteroscopy (23%); however, 40% of patients received a temporising ureteric stent rather than definitive surgical intervention at the outset. Females were less likely to receive a CT scan of the kidneys, ureters, and bladder within 24 hours (13% vs 7.3%; p = 0.01) and were less likely to receive correct analgesia (66% vs 73%; p = 0.03). Older patients (≥60 years) were less likely to be offered NSAID analgesia appropriately. Overall, calcium levels had been measured within the last 2 years in 87% of patients and stone prevention diet and fluid advice had been offered to 73% of patients.

Comment: Acute intervention for renal colic has frequently relied on the use of temporising ureteric stents prior to definitive stone surgery. Whilst technically easier and more readily available to perform as an emergency intervention than ureteroscopy and laser or shockwave lithotripsy, this approach can cause adverse stent-related symptoms during the delay until the definitive treatment of the stone. In this unique BAUS clinical audit of all emergency presentations of acute renal colic in 107 hospitals, 40% of patients in whom active intervention was appropriate underwent placement of a temporising ureteric stent rather than undergoing definitive surgical intervention at the outset, with females less likely to receive CT and to be given correct analgesia compared to males. This evidence-based audit of the acute colic pathway approach has the exciting potential to facilitate quality improvement on a national scale in a short time frame. Through rigorous assessment of the existing evidence, coupled with identification of the gaps between current practice and evidence-based best practice, relevant clinical tools can be developed to optimise clinical practice.

Reference: BJU Int. 2023;131(5):602-610
Abstract

Mapping European Association of Urology guideline practice across Europe: An audit of androgen deprivation therapy use before prostate cancer surgery in 6598 cases in 187 hospitals across 31 European countries

Authors: MacLennan S et al.

Summary: This European, retrospective, observational, cross-sectional audit examined current androgen deprivation therapy (ADT) use before prostate cancer surgery in 6598 patients with prostate cancer from 187 hospitals in 31 countries. Overall, nonadherence to previous European Association of Urology (EAU) guidelines to "Do not offer neoadjuvant ADT before surgery for patients with prostate cancer" was 2% with individual hospital rates ranging from 0-32%. The variability in nonadherence to the guideline was most pronounced in a high-risk subgroup, where nonadherence ranged from 0-43% (overall 4%).

Comment: Reasons for providing ADT before surgery, such as attempting to reduce the tumour volume before surgery or the risk of positive margins, are somewhat supported by the evidence base but do not translate into better oncological outcomes. Furthermore, ADT has been prescribed as an interim measure to control prostate cancer because of long waiting lists during disruptive events such as the COVID-19 pandemic. In this observational, cross-sectional audit of recent ADT practices in a multinational setting, most of the variability was found in the high-risk subgroup, for which nonadherence was 4% (range 0-43%) and reasons for nonadherence included attempts to improve oncological outcomes or pre-operative tumour parameters, attempts to control cancer because of long waiting lists, and patient preference. A possible explanation for the finding that guideline adherence is high in most countries is that we are seeing the "tail end" of ADT de-implementation. That is, ADT overuse, at least before surgery, was a problem in the past but is now waning. Contemporary evidence demonstrates that ADT before surgery has no benefits in terms of strong clinical endpoints but can cause adverse events (e.g., hormonal changes, cardiovascular disease, diabetes, osteoporosis), as well as hidden and real costs associated with administering and managing these adverse events. Inappropriate ADT use is worrying and can lead to (avoidable) adverse events for patients. Strategies towards discontinuing inappropriate ADT use should be pursued and ADT de-implementation could be addressed via interventions such as education on guidelines and training on evidence-based medicine.

Reference: Eur Urol. 2023;83(5):393-401
Abstract

Efficacy and patient satisfaction of low-intensity shockwave treatment for erectile dysfunction in a retrospective real-world study in Japan

Authors: Kurosawa M et al.

Summary: Japanese researchers sought to compare the efficacy between two types of low-intensity extracorporeal shockwave therapy (LIESWT; ED1000 [focused type] n = 76; and Renova [linear type] n = 484), in patients with erectile dysfunction (ED), and assessed factors associated with therapeutic benefit. Sexual symptom scores improved with both treatments and changes in scores did not differ between them. Patient satisfaction score did not differ between ED1000 and Renova (65.8% vs 71.1%). Only age was found to be a factor influencing efficacy of Renova.

Comment: Recently, LIESWT has been accepted as a non-invasive, effective treatment in a carefully selected group of males with ED. In this single-centre retrospective study, there was no difference detected in sexual symptoms scores and patient satisfaction rates between ED1000 and Renova LIESWT machines, although age appears to be an important factor influencing the efficacy of the Renova machine. The physiological mechanism of penile erection is complex, and ED is often related to multifactorial causes. While LIESWT can be effective in younger males, those with mild-to-moderate ED, and in the absence of significant risk factors for ED, there are many issues that need to be addressed before LIESWT can be adopted as the new standard of care for ED. The types of LIESWT machines, treatment protocols and settings, as well as the role of adjunctive measures such as tadalafil, require further studies to confirm long-term clinical efficacy and safety outcomes in this vulnerable group.

Reference: Int J Urol. 2023;30(4):375-380
Abstract

Risk factors for increased stent-associated symptoms following ureteroscopy for urinary stones: Results from STENTS

Authors: Harper JD et al.

Summary: The American, prospective, multicentre, observational STudy to Enhance uNderstanding of sTent-associated Symptoms (STENTS; n = 424; mean age 49 years; 47% female) examined risk factors for pain and urinary symptoms, and their effect on daily activities after ureteroscopic stone treatment. There was a marked increase in stent-associated symptoms on post-operative day 1, and while pain intensity decreased ≈50% by post-operative day 5, interference due to pain remained elevated. Multivariate analysis indicated that lower pain intensity was associated with older age (p = 0.004), while higher pain intensity was associated with chronic pain conditions (p < 0.001), previous severe stent pain (p = 0.021), and depressive symptoms at baseline (p < 0.001).

Comment: STENTS is a prospective, multicentre, observational cohort study, using multiple instruments with a conceptual overlap in various domains in patients receiving a ureteral stent. In this cohort, interference persisted even as pain intensity decreased, and multivariate analysis showed that younger age, chronic pain, prior severe stent pain and depression rather than surgical factors were associated with symptom intensity. Patients with stents often experience debilitating symptoms, including pain, urinary urgency and frequency, haematuria, and incontinence. Little is known about risk factors, and researchers have struggled to understand and predict who will suffer and to what degree of severity and range of stent-associated symptoms. Hence, a clear understanding of this stent-associated symptoms phenomenon is useful to patient counselling and can serve as a building block for stent-related research and develop effective strategies to (pre-emptively) mitigate these symptoms.

Reference: J Urol. 2023;209(5):971-980
Abstract

Safety, tolerability and short-term efficacy of transvaginal fractional bipolar radiofrequency therapy for symptoms of stress and or mixed incontinence in conjunction with genitourinary syndrome of menopause

Authors: Abdelaziz A et al.

Summary: This American prospective study assessed outcomes from a single treatment with fractional bipolar radiofrequency (RF) delivered via 24 microneedles (depth 1, 2, and 3 mm) in the vaginal canal in 20 women with coexistent stress or mixed incontinence and genitourinary syndromes of menopause. All outcomes (cough stress test, Medical Epidemiologic and Social Aspects of Ageing [MESA]-stress incontinence, MESA-urinary incontinence, Incontinence Quality of life Instrument, Urogenital Distress Inventory Short Form questionnaires, and evaluation of vaginal tissue on the Vaginal Health Index Scale) showed improvement from baseline to 6 months post-treatment.

Comment: RF was first proposed as a non-surgical treatment option for stress urinary incontinence in 2002 with worldwide interest. RF electrothermal energy heats underlying connective tissue to induce micro-inflammatory stimulation of fibroblasts and collagen formation resulting in a functional change rather than an anatomic change. In this single-centre prospective study, fractional bipolar RF energy using the EmpowerRF platform with the Morpheus8V applicator (InMode) was found to significantly improve various parameters scored in the questionnaires including frequency, urgency, nocturia, urge incontinence, and stress incontinence up to 6 months post-treatment. While the short-term clinical effectiveness coupled with non-invasiveness and absence of adverse effects with RF has resulted in this therapy gaining significant popularity in recent years, longer-term data on clinical efficacy and actual tissue changes remains unknown and more studies are required before this RF can be accepted as a standard of care.

Reference: Neurourol Urodyn. 2023;42(4):807-813
Abstract

Effects of gender-affirming hormone therapy on orgasm function of transgender men and women: A long term follow up

Authors: Zaliznyak M et al.

Summary: This US study examined changes in orgasm quality and function during masturbation of 33 transgender men (TM) and 130 transgender women (TW) after commencing gender-affirming hormone therapy (GAHT). TM and TW reported similar responses to an inventory of domains before starting GAHT, including lead-time to reach orgasm, duration of orgasm, body location of orgasm sensation, single or multiple-peak event, duration of post-orgasm refractory period, and overall satisfaction with orgasm quality. After GAHT, TW reported an increase in lead-time necessary to reach orgasm, orgasm duration, and overall orgasm satisfaction, while TM reported an increase in duration of orgasm and orgasm quality. More than half the TW reported experiencing orgasms in new locations and the majority of TM and TW patients reported orgasms had changed from a short, single-peak event to longer, protracted multiple-peak orgasms.

Comment: In line with increasing numbers of transgender and gender nonbinary people requesting hormone treatment, the body of available research is expanding. Hormonal regimens have changed over time, and older data may be less relevant for today's practice. This interesting study showed both TM and TW reported positive changes in orgasm quality and function following GAHT. With GAHT, body composition and contours change towards the affirmed sex. Nonetheless, other factors need to be considered given the potential (serious) long-term effects. The ideal age to start GAHT in adolescence is heavily debated and more difficult to determine is an ideal age to start sex hormones to induce puberty. Very little is known about gender nonbinary people's goals for hormonal interventions and what to advise. Likewise, the data on GAHT in elderly transgender people remain nearly inexistent. Special attention is needed for trans-adolescents and adults to ensure adequate dosage of hormonal supplementation and stimulating therapy compliance to avoid a potential increased risk of myocardial infarction and stroke. The observed cancer risk in transgender people does not exceed the known cancer risk differences between men and women.

Reference: Urology 2023;174:86-91
Abstract

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