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Multidisciplinary management of sexual quality of life among menopausal women with urogynecological complains

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ABSTRACT

Genitourinary syndrome of menopause (GSM) is found to be the most important cause of genitopelvic pain disorders among menopausal women. The term GSM includes genital symptoms (dryness, burning and irritation), sexual symptoms (lack of lubrication, discomfort or pain) and urinary symptoms (urgency, dysuria and recurrent urinary tract infections). Indeed, estrogen deprivation has a profound physiological impact throughout the body leading to changes in many organs and systems; it engages the whole genitourinary system, and the bladder and lower urinary tract are no exception. The GSM lead often to sexual complains at different levels (desire, arousal, lubrication, orgasm, satisfaction) and the physician need to consider all factors that worsen the patient's quality of life (QoL), also sexual one.

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SOMMARIO

La sindrome genitourinaria della menopausa (GSM) è la più importante causa dei disturbi da dolore genitopelvico nelle donne in menopausa.

Il termine GSM comprende sintomi genitali (secchezza, bruciore e irritazione), sintomi sessuali (mancanza di lubrificazione, disagio o dolore) e sintomi urinari (urgenza, disuria e infezioni ricorrenti del tratto urinario). Infatti, la deprivazione estrogenica ha un profondo impatto fisiologico in tutto l'organismo, determinando cambiamenti a livello di molti organi e apparati; anche l'intero sistema genito-urinario risulta coinvolto e la vescica e il tratto urinario inferiore non fanno eccezione. La GSM determina spesso disagio sessuale a diversi livelli (desiderio, eccitazione, lubrificazione, orgasmo, soddisfazione) e il medico è tenuto a considerare tutti i fattori che peggiorano la qualità della vita della paziente (QoL), compresa quella sessuale.

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continue from Abstract...

The usage of estrogen therapy is controversial in the treatment of both urinary incontinence and pelvic floor disorders, while several positive effects on sexual function have been reported in surgical therapies.

Thus, the therapeutic strategies need a multidisciplinary management and an accurate diagnostic evaluation, in order to verify not only physiological issues but also psychological and relational consequences of the urogynecological complain on patient quality of life.

Key words: menopause; female sexual dysfunction; urogynecology; pelvic floor disorders; urinary incontinence.

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L'utilizzo della terapia estrogenica nel trattamento dell'incontinenza urinaria e dei disturbi del pavimento pelvico è controverso, mentre sono stati riportati diversi effetti positivi sulla funzione sessuale nelle terapie chirurgiche.

Pertanto, le strategie terapeutiche necessitano di una gestione multidisciplinare e di un'accurata valutazione diagnostica, al fine di verificare non soltanto le problematiche fisiologiche ma anche le conseguenze a livello psicologico e relazionale del disturbo uroginecologico lamentato sulla qualità della vita delle pazienti.

INTRODUCTION

Female sexual health is the result of a complex interaction between several biological, psychological and socio-relational factors. Different clinical conditions affecting women can compromise sexual function, such as gynecological cancer or infertility⁽¹⁻⁶⁾.

Menopausal age may adversely affect the entire cycle of sexual response, inducing significant changes in sexual desire, arousal, orgasm, and sexual satisfaction. Hormonal changes, together with psycho-physical well-being and relationship quality contribute to the construction of a new post-menopausal sexuality^(7,8).

From a hormonal perspective, vascular, musculoskeletal and urogenital structures become highly vulnerable to estrogenic deprivation of menopause⁽⁸⁻¹¹⁾.

The percentage of postmenopausal women with urogenital atrophic symptoms varies from 10 to 40%, but only 25% of these patients report this disorder to specialists and only a few received hormone replacement therapy (HRT)⁽¹²⁻¹⁵⁾. In Western countries, 8% of the general population suffers from problems with urogenital atrophy and in the US, about 20 million women who do not take HRT report these symptoms with a great personal burden⁽¹³⁾.

The symptoms related to urogenital aging can be divided into two groups: the first one is located at the lower urinary tract (urethra and bladder) and the second one is confined to the vulvo-vaginal area. In the first group are included dysuria, nocturia, recurrent urinary infections and incontinence; in the second group, we find vaginal

dryness, itching, burning and dyspareunia. Both symptomatic patterns originate from urogenital atrophy, which causes thinning and hypotrophy of the mucous membranes that ultimately depend on postmenopausal hypoestrogenism⁽¹⁶⁻¹⁹⁾.

Moreover, the possible reduction of androgen levels, as occurs more frequently in surgical menopause, exerts a negative effect on the libido and sexual receptivity of the woman⁽²⁰⁾.

FEMALE SEXUAL DYSFUNCTIONS (FSD) RELATED WITH UROGYNECOLOGICAL COMPLAINS

FSD are common among women with urogynecological complains although they still have been poorly studied^(7,8,21).

Urinary Incontinence

Urinary Incontinence (UI) is an important public health problem due to its strong diffusion and the high physical, psychic and social impact on the lives of the women affected and it seems to be an important risk factor of FSD. Major complains regard low lubrication, more sexual pain and the worsening of different psychosexual domains (sexual satisfaction, body image, mood, self-esteem and relational quality)⁽²²⁻²⁴⁾. Anyway, most of these studies have some important biases (sample selection, different study designs, uncategorization of UIs).

Urinary dysfunction therapies are behavioral,

pharmacological and surgical. The choice of best therapy is conditioned by several factors: history and age of the patient, severity of subjective symptoms, urogenital obesity and clinical - instrumental examinations⁽²⁴⁾.

Therapy for pure urgency incontinence is usually pharmacological, whereas for stress urinary incontinence (SUI) is mainly surgical⁽²²⁻²⁵⁾. In women with urgency incontinence, it has been demonstrated that a combination of behavioral measures (including bladder retraining) and antimuscarinic drug therapy reduced overactive bladder symptoms and urinary incontinence during sexual intercourse and orgasm⁽²⁶⁾.

The role of estrogen therapy on urinary incontinence is still debated. The Women's Health Initiative (WHI) trial showed an increase in the incidence of urgency, stress, and mixed incontinence in women after one year of treatment with estrogen and medroxyprogesterone acetate⁽²⁷⁾. In this study, the population was not selected for the urinary incontinence evaluation, data were collected only with self-report questionnaires and the estrogen therapy's starting age was distributed in a wide range. Thus, all these factors may explain some discrepancies and reduce the value of the study. In this regard, other studies have shown that oral estrogen administration increases the maximum urethral closure pressure (MUCP) in women with SUI⁽²⁸⁾ and improves some post-menopausal symptoms such as urinary frequency, nocturia, recurrent infections⁽²⁹⁾.

Other studies state that oral and local estrogenic therapy does not improve SUI itself, but have positive effects on subjective symptoms^(25,30): in these cases, perineal pelvis rehabilitation and reinforcement of periurethral muscle structures may be the better therapeutic choice.

Mini-invasive surgery, using tension-free suburethral slings, represents the best choice in treating female urinary incontinence; In particular, the most recent transobturator tape (TOT) ensures good results, shows lower intraoperative morbidity and reduce hospitalization times as well as fewer postoperative complications^(31,32). Moreover, TOT, together with tension-free vaginal tape (TVT), improve vaginal wall's elasticity and clitoral blood flow, influencing positively the sexual behaviour of women with SUI^(33,34).

For what concern SUI, vaginal pessaries represent an effective conservative treatment. The satisfaction rate of women treated with vaginal pessary is high and women reported minor complications only in few cases⁽³⁵⁾.

Lower Urinary Tract Symptoms

Lower Urinary Tract Symptoms (LUTS) are characterized by a series of symptoms related to the bladder filling phase and include the higher frequency of daily and nocturnal leakage, defined as daytime and nighttime pullochuria⁽³⁶⁾. LUTS are very common in the female population and have a significant impact on physiological, social and sexual wellbeing⁽³⁶⁻³⁸⁾. Unlike UI, there are few studies investigating women's sexuality with LUTS, and many of them present several methodological defects, represented by the use of different psychometric instruments and indexes for sexual evaluation of these patients.

Most studies have shown how LUTS can have a significant negative impact on women's sexuality, considering coital pain disorders as the most common sexual problem referred by patients with bladder dysfunction: in fact, LUTS are frequently associated with an inflammation of female genitals and a reduction in vaginal lubrication during sexual intercourse⁽³⁹⁻⁴¹⁾.

Moreover, Moller et al. suggest that the presence of female sexual dysfunctions and the interruption of sexual activity could increase the occurrence of LUTS: a 3 to 6-fold higher prevalence of LUTS was observed in women without sexual activity in comparison to women who had sex, and in women who resumed sexual intercourse, an insignificant decrease in LUTS was observed⁽³⁷⁾.

Pelvic Floor Disorders

It is known that most Pelvic Floor Disorders (PFDs) adversely affect sexual health. These symptoms are associated with a reduction in sexual arousal and orgasm and frequent dyspareunia^(38,39).

Pelvic organ prolapse (POP) is resulted by the collapse of the suspension and support structures of the pelvic organs. The various organs in the pelvic floor can lose their support individually or in combination, resulting in different combinations and prolapse grades. In women with POP, sexual function is closely related to sexual bodily image: women with stage 2 or greater POP complain reduced/absent sexual desire and satisfaction⁽⁴²⁻⁴⁴⁾. In the approach to menopausal sexual symptoms, therefore, it is necessary to have an accurate diagnostic and therapeutic management to restore the hormonal balance that modulates sexual response, excluding the presence of other factors that may affect the sense of femininity and the couple relationship⁽⁴⁶⁾.

Despite the evidence of the importance of estrogen in maintaining the architecture and

functionality of pelvic floor structures and their positive role throughout the urogenital tract, there is no clear evidence to support the positive effect of local or systemic estrogen therapy on POP prevention⁽⁸⁾.

In fact, neither the menopausal state nor the length of the estrogenic deficit was directly associated with the risk or degree of POP. The use of estrogens in general and even more topically, however, plays an important role although not well-systematized for the preparation of patients to undergo reconstructive surgery of the pelvic floor: these therapies improve the trophism of vulvo-vaginal tissues, allow better anatomical reconstruction and reduce the risk of erosion in the case of prosthetic surgery.

Likewise, the administration of local estrogenic therapy is useful in the management of postsurgical complications, for example for the control of novo urgency that frequently occurs after prolapse surgery or for the management of mesh erosions⁽⁴⁾.

The use of pessary to treat pelvic disorders positively affects a woman's bodily image, sexual function, and sexual activity. However, women using a pessary have reported some concerns about their partner's sexual experience, negatively affected using this instrument⁽⁴⁸⁻⁵⁰⁾.

Some investigators have reported that the surgical treatment of pelvic floor weakness and organ prolapse improves sexual function in the patients. However, the positive effect of treatment has not been confirmed in all studies^(51,52). Finally, it has been demonstrated that porcine dermis graft to treat severe cystocele improves personal and sexual quality of life, without affecting clitoral blood flow⁽⁵³⁾.

CONCLUSION

The analysis of recent literature about sexual complains in women with urogynecological complains shows a very wide spectrum of treatment approaches, in which physician must

take in consideration not only the primary symptoms, but also all the related factors that are negatively affected by postmenopausal symptoms. For example, estrogenic therapy results controversial^(4,27), although it is specifically indicated in specific conditions, like in the pre-surgical management of POP⁽⁸⁾, and positively impact on many subjective symptoms related with urogynecological complains⁽²⁵⁻³⁰⁾. Together with surgical options, also behavioural approach could positively impact on the treatment process⁽²⁴⁾.

In this scenario, a multidisciplinary approach in the management of urogynecological complains is highly recommended. First it is important to provide an adequate preliminary clinical and instrumental evaluation of the urogynecological complain in order to correctly address the patient to a proper medical and/or surgical therapeutic route. It is important to remember to evaluate the related psychological and sexual dysfunctions. As discussed above, they have an extremely important influence on general well-being and quality of life^(7,8,24,26,36,42). In the light of these considerations, sexological counselling can be advisable to evaluate the impact of urogynecological dysfunctions on sexual well-being of patients. For this purpose, it would be appropriate to use validated instruments that evaluate the impact of urogynecological disorders on QoL and women's sexual function⁽⁶⁴⁾. The assessment through these instruments should become an integral part of the therapeutic process in order to limit negative consequences of the disease and choose the best therapeutic solution for the patient.

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