NAMS Practice Pearl

Restoring Vaginal Function in Postmenopausal Women With Genitourinary Syndrome of Menopause

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Risa Kagan, MD, FACOG, CCD, NCMP
(University of California, San Francisco,
and Sutter East Bay Medical Foundation, Berkeley, California)

Eliza Rivera, PT, DPT, WCS
(University of Florida Health, Jacksonville, Florida)

Menopause practitioners are often asked to help postmenopausal women restore vaginal health and function. A common scenario is the postmenopausal woman who has been without a sexual partner for many years and is now about to resume or has already unsuccessfully attempted penetrative sexual activity. This* Practice Pearl *addresses the pathophysiology and effect of atrophic genital changes and offers advice on how vaginal health and comfortable sexual activity can be restored.

The genitourinary syndrome of menopause (GSM) is the most common cause of dyspareunia in postmenopausal women.[1,2] Before making this diagnosis, a careful examination to rule out other conditions, such as lichen sclerosis, should be performed. The genitourinary syndrome of menopause includes symptoms of vulvovaginal atrophy (VVA)—vulvar or vaginal dryness, discharge, itching, and dyspareunia—that occur from the loss of superficial epithelial cells and reduced collagen and elastin that lead to thinning of the tissue. Loss of vaginal rugae and elasticity result in a narrowing and shortening of the vagina as a direct result of the decline in estrogen and other sex steroids. The vaginal epithelium can become pale and friable, leading to tears and bleeding. The labia majora can lose subcutaneous fat, the introitus may narrow, loss of tissue from the labia minora and clitoris may occur, and the clitoral hood may fuse. Blood flow to the vaginal mucosa may decline, and vaginal pH may increase, leading to the loss of lactobacilli and a marked change in the microbiome.

Unlike vasomotor symptoms, which improve over time, symptoms of GSM are chronic and progressive and will generally not resolve without a therapeutic intervention. The genitourinary syndrome of menopause has been reported to affect approximately 50% of women, but many women are unaware that these symptoms are the result of a decline in estrogen and that safe, effective treatment options available.[1,2] Published surveys of postmenopausal women reveal that these symptoms negatively affect sexual health, interpersonal relationships, and quality of life (QOL). Even in women who are not sexually active, these symptoms have been reported to reduce self-esteem and QOL.

In addition to VVA-related vaginal symptoms, GSM also incorporates lower urinary tract symptoms including frequency, urgency, dysuria, nocturia, and recurrent urinary tract infections. The urethral meatus often becomes prominent as the introitus contracts, increasing the risk of infection and irritation. Because GSM is a more comprehensive term, it is now generally preferred, although both terms are used.[1,2]

Nonhormone water- or silicone-based vaginal lubricants and moisturizers may temporarily alleviate symptoms but do not alter the underlying physiologic changes responsible for symptoms.[3] For symptomatic women who do not respond to these remedies, local low-dose vaginal estrogen therapy (ET) creams, tablets, and rings have been approved for the treatment of VVA.[2] Although systemic ET also is approved for VVA, low-dose vaginal ET is recommended if VVA is the sole indication for hormone therapy. A Cochrane review of 30 randomized, controlled trials involving 6,235 women reported that the efficacy of these formulations in relieving symptoms of VVA was similar.[4] This review also found no increased risk of endometrial hyperplasia with local therapy; therefore, the addition of progestogen is not generally needed for women with a uterus. Despite these safe, effective options to reverse the underlying physiology of GSM, less than 10% of postmenopausal women are being treated.[5]

Alternatives to low-dose vaginal estrogens also are approved for dyspareunia associated with VVA. In 2013, ospemifene, an oral selective estrogen-receptor modulator (SERM) with agonistic vaginal effects, was approved to treat moderate to severe dyspareunia associated with menopause. A dehydroepiandrosterone vaginal insert (prasterone) used daily has been approved for the same indication. Personal preference and formulary issues are key factors in shared decision making with a woman when initiating therapy for GSM.

By causing early menopause, surgery, chemotherapy, and radiation therapy may lead to GSM and sexual dysfunction in survivors of cancer.[2] In addition, aromatase inhibitors, often used as adjuvant therapy after initial treatment of receptor-positive breast cancer in postmenopausal women, may exacerbate or precipitate GSM. In contrast, the SERM tamoxifen is agonistic on vaginal epithelium but is being used less frequently for postmenopausal survivors of breast cancer. The off-label use of local low-dose vaginal ET has been proposed for VVA-related dyspareunia unrelieved by nonhormone treatments in women who have been treated for breast or endometrial cancer after consultation with a woman's oncologist.[2,6] In contrast with vaginal ET, a personal history of breast cancer is not listed as a contraindication to the use of prasterone.

In conjunction with medical therapies, women who desire to return to comfortable intercourse may benefit from the use of vaginal dilators, which come in a variety of shapes and sizes. Ridged dilators are useful to gradually increase or maintain vaginal vault size after pelvic radiation. Symptomatic women who have received radiation for urogynecologic cancers should be instructed in the use of vaginal dilators and placed on a maintenance schedule for 10 to 15 minutes one to three times per week. Soft silicone dilators may be better for patients with muscle guarding and can be used for soft-tissue massage as well as incorporated into foreplay to help prepare for penetration. Women's health physical therapists can play an important role in education regarding the use of dilators and sexual position modification, including the use of pillows or sex wedges to enhance comfort.

Increases in pelvic floor muscle (PFM) tone and the presence of myofascial trigger points (MTrPs), such as taut bands or tender spots within the levator ani muscles, also are commonly encountered in women with symptomatic GSM and can contribute to persistent dyspareunia.

Effective treatment of increased PFM tone and MTrPs begins with their identification. While performing pelvic examinations, providers often focus on inspection of vestibular and vaginal mucosal tissues. However, only digital vaginal palpation of the PFM will detect increased PFM tone and trigger points.[7] One technique to help alleviate pain for women with painful penetration caused by tender PFM is for the patient to perform repeated, gentle, pain-free PFM contractions followed by full relaxation performed for 20 to 30 repetitions. This promotes improved blood flow and reduced muscle guarding before penetration.

Increasingly employed in the treatment of urinary incontinence and pelvic organ prolapse, PFM training refers to an exercise program targeted to improve levator ani function, improve blood flow, restore normal tone, and improve strength and endurance. Pelvic floor muscle training programs, designed by specially trained physical therapists and individualized for each woman's needs, have been shown to improve sexual function and QOL in postmenopausal women.[8]

Laser technology is being promoted to consumers and practitioners for treatment of GSM and dyspareunia. Small, mostly noncontrolled study results have been published, but until the results of larger, long-term, randomized, sham-controlled studies are conducted to evaluate the safety and efficacy of this procedure, professional organizations are not likely to endorse lasers as therapeutic options.[9]

Many women assume that their symptoms are normal for age, and they are often embarrassed to raise concerns with their healthcare providers. Women can benefit from a sensitive expert clinician and a trained women's health physical therapist. The key to improving symptoms and QOL is to increase women's awareness of GSM and for providers to ask about symptoms and provide a pathway for therapeutic intervention.

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Disclosures

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