Diagnosis and Treatment of Genitourinary Syndrome of Menopause

Ashley L. Hodges, Aimee C. Holland, Barbara Dehn & Diane T. Pace

ABSTRACT: Genitourinary syndrome of menopause (GSM), formerly referred to as *vulvovaginal atrophy* or *atrophic vaginitis,* is a common chronic condition that requires a collaborative treatment plan between a health care provider and a woman to relieve symptoms and improve quality of life. Many women are not aware that symptoms can be controlled with treatment. Current treatment options approved for GSM include vaginal moisturizers, lubricants, and hormones. For women with GSM symptoms that are unresponsive to nonhormonal therapy, low-dose vaginal estrogen therapy is the preferred pharmacologic treatment. Clinicians should be trained to routinely ask appropriate questions during the history to elicit sufficient information to assess for GSM. Physical examination findings may further confirm suspicion of GSM.

doi: 10.1016/j.nwh.2018.07.005 Accepted July 2018

KEYWORDS: atrophic vaginitis, dyspareunia, genitourinary syndrome of menopause, menopause, vaginal atrophy, vaginal estrogen

The terms *vulvovaginal atrophy* and *atrophic vaginitis* have been used in the past and often are still used to refer to changes in the vagina, vulva, and urinary tract attributed to declining estrogen levels that occur during the postmenopausal period. As estradiol levels decrease, there is a loss of collagen, reduction in the density of connective tissue, thinning of the epithelial tissue, increases in vaginal pH, and reduction in normal vaginal flora, all of which contribute to many of the symptoms women experience (Kim, Kang, Chung, Kim, & Kim, 2015). The vagina loses elasticity, shortens, narrows, and may be easily traumatized and irritated with loss of rugae. Vaginal secretions significantly decrease, affecting natural lubrication during sexual stimulation, and with these changes, many women will

  doi: 10.1016/j.nwh.2018.07.005

FLA 5.5.0 DTD ■ NWH210_proof ■ 28 August 2018 ■ 5:48 am ■ ce

CLINICAL IMPLICATIONS

- Diagnosis and treatment of genitourinary syndrome of menopause (GSM) is symptom driven.
- Health care providers should routinely ask women appropriate questions about GSM symptoms.
- Nonhormonal and hormonal treatment options are available for consideration.
- Vaginal estrogen therapy is currently recommended as the first-line hormonal treatment.
- Clinicians must consider risks and benefits of treatment for each individual woman.

experience dyspareunia (North American Menopause Society, 2013).

Background and Nomenclature

The term *genitourinary syndrome of menopause* (GSM) emerged in 2013 after an expert panel convened by the North American Menopause Society and the International Society for the Study of Women's Sexual Health collaborated to discuss the need for adopting a change in nomenclature. Members of the panel found that the term *vulvovaginal atrophy* excluded the anatomic area of the urinary tract, which is also affected by estrogen deficiency, leading to symptoms and diagnostic appearances. The word *atrophy* was determined to have negative connotations, and the word *vagina* was not considered an acceptable term to be shared in the public domain, including the media. The panel determined that a new term was needed and began to identify many components to develop new terminology (Portman, Gass, & Vulvovaginal Atrophy Terminology Consensus Conference Panel, 2014). Proceedings from the consensus conference were disseminated at the annual meetings of both organizations, and both boards of directors formally approved the term in early 2014 (Portman et al., 2014). Since then, other professional organizations, including the American College of Obstetricians and Gynecologists, have adopted *GSM* as the preferred term. However, clinicians will continue to see the terms *vulvovaginal atrophy* and *atrophic vaginitis* used concurrently in the literature for some time, because these terms were used in research completed before adoption of the term *GSM* and are still used as U.S. Food and Drug Administration (FDA)–approved terms for treatment indications in medications.

Ashley L. Hodges, PhD, CRNP, WHNP-BC, is an associate professor and the Assistant Dean for Graduate Clinical Programs in the School of Nursing, University of Alabama at Birmingham, Birmingham, AL. **Aimee C. Holland**, DNP, WHNP-BC, FNP-C, FAANP, is an associate professor and the DNP Program Director in the School of Nursing, University of Alabama at Birmingham, Birmingham, AL. **Barbara Dehn**, NP, FAANP, NCMP, is a nurse practitioner at El Camino Women's Medical Group, Mountain View, CA. **Diane T. Pace**, PhD, APRN, FNP-BC, NCMP, FAANP, FAAN, is a professor and the Director of Special Academic Programs in the College of Nursing and an associate professor in the College of Medicine at the University of Tennessee Health Science Center, Memphis, TN. Ms. Dehn discloses receiving compensation for advisory board and speakers bureau work from Hologic, Lupin Pharmaceuticals, and AMAG Pharmaceuticals. Dr. Pace discloses receiving compensation for advisory board and speakers bureau work from Allergan, AMAG Pharmaceuticals, Hologic, Pfizer, and Therapeutic Pharmaceuticals. **Address correspondence to:** ashleyhodges@uab.edu.

Photo © audriusmerfeldas / iStockphoto.com

Prevalence and Risk Factors

Genitourinary syndrome of menopause affects approximately 50% of postmenopausal women. Although most often discussed in relation to menopause, GSM can also occur postpartum or during lactation and with use of certain medications such as aromatase inhibitors (North American Menopause Society, 2013). Risk factors for GSM, modifiable and nonmodifiable, are listed in Box 1.

> Symptoms of GSM can present in the early postmenopausal period and persist for years

Symptoms

Symptoms of GSM should be evaluated by clinicians during an annual/periodic examination or during clinical visits before a woman begins to experience the onset of symptoms and during follow-up visits throughout the postmenopausal period. However, evidence in the literature suggests that many women do not realize that their symptoms are related to the decreasing effects of estrogen due to menopause or are unaware of treatment options. Those individuals who are aware of treatment options, including exogenous estrogen, often have concerns about medication safety and may have not been fully counseled by their clinicians. Research findings also suggest low treatment rates and a failure of health care professionals to evaluate women for GSM signs and symptoms. Providers may not know the evidence to counsel women

doi: 10.1016/j.nwh.2018.07.005