

Genitourinary Syndrome of Menopause (GSM) and Vaginal Health in Geriatric Patients

A Guide for Primary Care Physicians

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Learning Objectives

1

Define GSM and recognize its prevalence

2

Identify key symptoms affecting postmenopausal women

3

Review non-hormonal and hormonal treatment options

4

Discuss patient counseling strategies to improve care

What is GSM?

Definition:

- Chronic, progressive condition resulting from estrogen deficiency affecting the vagina, urethra, and bladder
- Previously known as vulvovaginal atrophy, atrophic vaginitis, or urogenital atrophy
- Does not include the vasomotor symptoms of menopause

Prevalence:

- Affects over 50% of postmenopausal women
- Symptoms often underreported due to stigma or normalization of discomfort

Symptoms of GSM

Vaginal Symptoms:

- Dryness
- Burning or irritation
- Dyspareunia

Urinary Symptoms:

- Increased frequency/urgency
- Recurrent UTIs
- Stress or urge incontinence

Impact on Quality of Life:

- Reduced sexual function and intimacy issues
- Decreased self-esteem
- Sleep disturbances due to urinary urgency

Pathophysiology of GSM

Estrogen loss → Thinning of vaginal epithelium

Decreased collagen & elastin → Loss of vaginal elasticity

Reduction in blood flow → Dryness and reduced lubrication

Increased pH & microbiome changes → Higher risk of infections

Diagnosis of GSM

Clinical Evaluation:

- Detailed symptom history (pain, dryness, urinary symptoms)
- Vaginal exam: thin, pale epithelium; decreased rugae
- pH testing (>5.0 suggests estrogen deficiency)
- Rule out infections (e.g., yeast, bacterial vaginosis)

Validated Tools:

- Vaginal Symptom Questionnaire (VSQ)
- Female Sexual Function Index (FSFI)

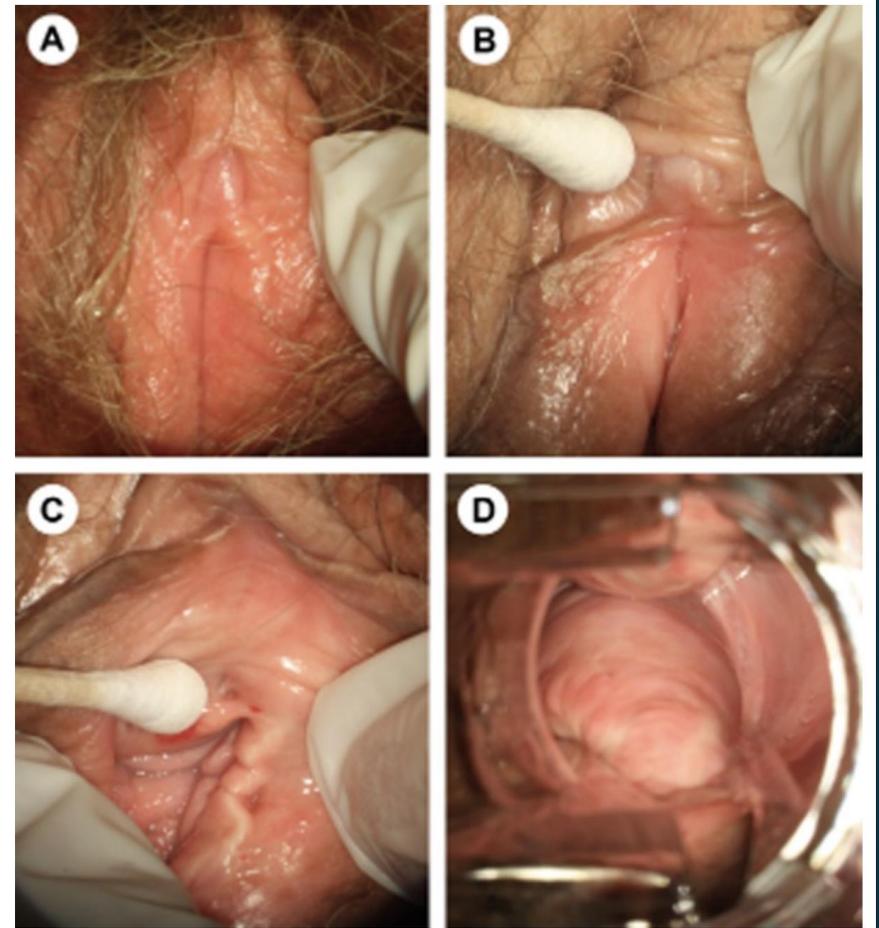
Physical Exam Findings

- External genitalia of a 67-year-old patient who is s/p menopause for two years and is not on estrogen replacement therapy
- Note the loss of labial and vulvar fullness, pallor of urethral and vaginal epithelium, and decreased vaginal moisture



Classic Signs of GSM on GU Exam

- A) Pale, dry, shiny vulvar tissue and loss of adipose tissue in the labia majora and labia minora
- (B) The prepuce and clitoris are often pale and reduced in size
- (C) The introitus may be narrowed and friable
- (D) The vaginal walls lack rugae and may be pale and/or erythematous
- Note patients may also bleed on manual or speculum exam, and a difficult speculum insertion is characteristic



Female Sexual Function Index (FSFI) ©

Subject Identifier _____

Date _____

INSTRUCTIONS: These questions ask about your sexual feelings and responses during the past 4 weeks. Please answer the following questions as honestly and clearly as possible. Your responses will be kept completely confidential. In answering these questions the following definitions apply:

Sexual activity can include caressing, foreplay, masturbation and vaginal intercourse.

Sexual intercourse is defined as penile penetration (entry) of the vagina.

Sexual stimulation includes situations like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.

CHECK ONLY ONE BOX PER QUESTION.

Sexual desire or interest is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

1. Over the past 4 weeks, how **often** did you feel sexual desire or interest?

- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

2. Over the past 4 weeks, how would you rate your **level** (degree) of sexual desire or interest?

- Very high
- High
- Moderate

skin symptoms of women. The skin surrounding the vagina is called the vulva. Just like skin in other parts of the body, the vulva can sometimes become irritated. Many women experience discomfort in the region of the vulva. These symptoms may be mild, but can sometimes be severe. The following questions will ask you about your vulvar skin symptoms during the past week.

During the past week, have you been bothered by:

1. Your vulva itching? No Yes
2. Your vulva burning or stinging? No Yes
3. Your vulva hurting? No Yes
4. Your vulva being irritated? No Yes
5. Your vulva being dry? No Yes
6. Discharge from your vulva or vagina? No Yes
7. Odor from your vulva or vagina? No Yes
8. Worry about your vulvar symptoms?
(for example, that it will spread, get worse, scar, etc.) No Yes
9. The appearance of your vulva? No Yes
10. Frustration about your vulvar symptoms? No Yes
11. Embarrassment about your vulvar symptoms? No Yes
12. The effects of your vulvar symptoms on your interactions with others? No Yes
13. The effects of your vulvar symptoms on your desire to be with people? No Yes
14. Your vulvar symptoms making it hard to show affection? No Yes
15. The effects of your vulvar symptoms on your daily activities? No Yes
16. Your vulvar symptoms affecting your desire to be intimate? No Yes
17. Are you currently sexually active with a partner?
 - No → Thank you. You are done with this questionnaire.
 - Yes → Please proceed with the next 4 questions



First-Line Treatments

- **Non-Hormonal Therapies:**
 - **Vaginal Moisturizers** (e.g., Replens) – Regular use
 - **Lubricants** (e.g., silicone-based for intercourse)
 - **Dilators- of graduated sizes**
 - **Pelvic floor therapy** for pain or tightness
- **Lifestyle Modifications:**
 - Increase hydration
 - Avoid irritants (soaps, douches)
 - Regular sexual stimulation (improves blood flow)

Vaginal Estrogen Therapy

- **Mechanism:**
- Increases vaginal pH
- **Indications:**
- Persistent symptoms despite non-hormonal treatments
- Recurrent UTIs due to atrophic changes
- **Options:**
- **Vaginal Creams** (Premarin/conjugated equine estrogen also available as oral tab and Estrace/synthetic human estradiol- available as generic, both are estradiol 0.01% cream)
- **Vaginal Tablets** (Imvexxy and Vagifem- available as generic, deliver 4 or 10 mcg estradiol per tab)
- **Vaginal Rings** (Estring, delivers 7.5 mcg estradiol per day, lasts 3 months)
- **Safety:**
- Minimal systemic absorption
- Safe for most women, including those with cardiovascular disease
- **Caution in hormone-sensitive cancers – consult heme/onc**



Specific contraindications for the use of estradiol hormone therapy in geriatric patients

Active or History of Arterial Thromboembolic Disease

Active or History of DVT or PE

Undiagnosed Abnormal Genital Bleeding: this requires evaluation to rule out malignancy before initiating hormone therapy

Active or History of Breast Cancer or Estrogen-Dependent Neoplasia

Hepatic Impairment or Disease

Known Thrombophilic Disorders

What about hormone replacement therapy?

The principal indication systemic estrogen therapy (commonly referred to as HRT) is the treatment of vasomotor symptoms (VMS) like hot flashes

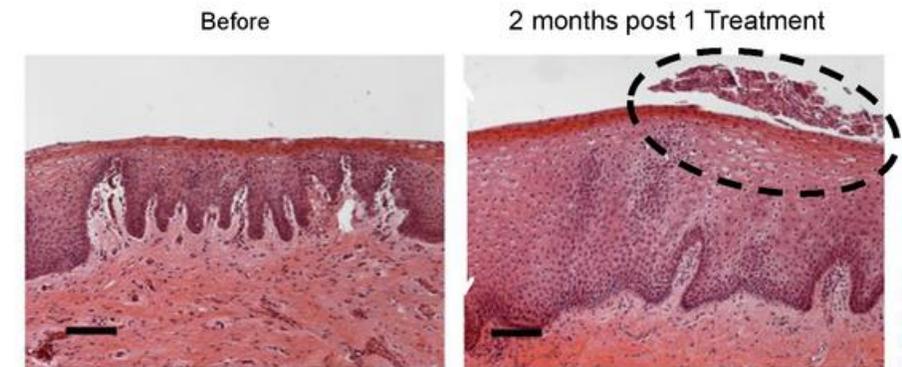
Vaginal ET is the recommendation for women with only vaginal symptoms as it allows for lower doses of estrogen than used in systemic therapy for VMS

Women's Health Initiative 1993 Clinical Trial

- NIH-funded WHI began a clinical trial in 1993 looking at the general health effects of patients taking conjugated equine estrogen (CEE) only or combined HRT compared to a placebo
- In 2002 the researchers halted the study over concern that the combination of CEE and medroxyprogesterone acetate increased breast cancer risk and did not improve quality of life
- This led to confusion and concern from doctors and patients worldwide, and in the number of patients taking HRT fell sharply
- Current WHI publications acknowledge HRT as the most effective treatment for managing menopausal vasomotor symptoms and report that CEE alone reduces the risk of breast cancer by 23% while reducing breast cancer death by 40%
- WHI's only remaining concern is a small increase in breast cancer incidence with CEE and medroxyprogesterone acetate (1 per 1,000 women per year) but with no increased risk of breast cancer mortality

Alternative Therapies

- **Ospemifene (SERM):** Oral option for dyspareunia, 60 mg tab daily
- **DHEA Vaginal Inserts (Prasterone):** Newer therapy, 6.5-mg vaginal insert each evening
- **Laser Therapy (MonaLisa Touch):** Limited evidence, high cost (\$2500 for first three treatments)



Scale bars: 100 μ m

Zerbinati N, et al. Microscopic and ultrastructural modifications of postmenopausal atrophic vaginal mucosa after fractional carbon dioxide laser treatment; Lasers Med Sci 2014 (pub. on-line)

But I can get
a one-month
supply of
OTC DHEA
tabs for \$5...

- Some research suggests DHEA might be slightly helpful in treating depression and vaginal atrophy, however this supplement is unregulated, and DHEA use can cause serious side effects
- **Recommend your patients avoid using this supplement.**
- Safety and side effects:
 - Possible increased levels of systemic androgens (“steroid affect”)
 - May cause oily skin, acne, and hirsutism
 - Increased risk of hormone-sensitive cancers; absolute contraindication to DHEA is pregnancy or breastfeeding
 - May reduce HDL levels; especially patients with HLD and ischemic heart disease should avoid

Addressing Patient Concerns

Common Barriers:

- Embarrassment discussing symptoms
- Fear of hormone therapy risks
- Lack of awareness that treatments exist

How to Approach Conversations:

- Normalize the topic: “Many women experience this...”
- Provide reassurance: “There are safe and effective treatments.”
- Use patient-friendly materials to support education

Key Takeaways

- ✓ GSM is common but often underdiagnosed
- ✓ Symptoms affect both vaginal and urinary health
- ✓ Non-hormonal treatments are first-line; vaginal estrogen is also highly effective
- ✓ Proactive discussion improves patient outcomes

Additional Resources

- [North American Menopause Society \(NAMS\) Resources for Providers](#)
- Patient Handouts (English language) on GSM & Vaginal Health
 - SmartPhrase: .AVSMENOPAUSEVAGINALHEALTH
 - Auto text: .MENOPAUSEVAGINALHEALTH

Patient handouts on GSM and Vaginal Health

Patient Guide: Menopause and Vaginal Health

Understanding Genitourinary Syndrome of Menopause (GSM)

Genitourinary Syndrome of Menopause (GSM) is a common condition that affects the vagina and urinary tract due to lower estrogen levels after menopause. It can cause **dryness, discomfort, and bladder issues**, but there are many ways to manage and treat these symptoms effectively.

Common Symptoms of GSM

Vaginal Symptoms

- Dryness, burning, or itching
- Pain or discomfort during sex
- Less natural lubrication

Urinary Symptoms

- Needing to urinate more often
- Frequent urinary tract infections (UTIs)
- Leaking urine when sneezing, coughing, or laughing

Other Symptoms

- Changes in vaginal shape or tightness
- Discomfort in the vulva area

What Causes GSM?

- **Menopause & Estrogen Loss:** Lower estrogen levels make vaginal and bladder tissues thinner and drier.
- **Lack of Sexual Activity:** Regular sexual activity helps maintain vaginal tissue health.
- **Certain Medications:** Some treatments, such as those for breast cancer, can worsen symptoms.
- **Smoking:** Reduces blood flow, making symptoms more severe.

Ways to Manage GSM & Improve Vaginal Health

Lifestyle Changes & Home Remedies

Stay Sexually Active: Helps keep vaginal tissues flexible and healthy

Use Vaginal Moisturizers: Over-the-counter products provide long-lasting hydration

Try Lubricants for Sex: Water-based or silicone-based lubricants reduce discomfort

Do Pelvic Floor Exercises (Kegels): Strengthen the muscles that support bladder control

Medical Treatments

Estrogen Therapy:

- Available as creams, rings, or tablets
- Helps restore vaginal moisture and health

DHEA (Prasterone) Therapy:

- A vaginal insert that improves moisture and tissue health

Ospemifene (Oral Medication for Painful Sex):

- A non-estrogen option that helps with vaginal discomfort
- Laser or Radiofrequency Therapy:**
- Stimulates collagen production to improve vaginal elasticity

Preventing GSM & Maintaining Vaginal Health

Stay sexually active to promote tissue flexibility

Avoid harsh soaps and douches that can cause irritation

Drink plenty of water and eat a balanced diet to support tissue health

Do pelvic floor exercises such as Kegels regularly for better bladder and vaginal support

Key Takeaways

GSM is **common but treatable**

Simple lifestyle changes and medical treatments can significantly improve symptoms

Prioritize **vaginal and urinary health** as part of your overall wellness

For More Information

North American Menopause Society (NAMS) Resources for Patient Education:

<https://menopause.org/patient-education>

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