

NAMS PRACTICE PEARL

Evaluation and Treatment of Vulvovaginal Itching in Postmenopausal Women

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Caroline Mitchell, MD, MPH
(Massachusetts General Hospital, Boston, Massachusetts)

Vulvovaginal itching, a commonly reported symptom in postmenopausal women, may be because of the genitourinary syndrome of menopause but has a broad differential including dermatologic, infectious, and autoimmune causes. Comprehensive evaluation is important to avoid inappropriate treatments that may delay the correct diagnosis. In many cases, no clear cause can be identified, and the goal of management is simply to control symptoms.

Vulvovaginal itching is reported by 17% to 33% of postmenopausal women.^{1,2} Potential causes include genitourinary syndrome of menopause, infection (eg, vulvovaginal candidiasis), dermatoses (eg, lichen sclerosus, lichen planus, psoriasis), autoimmune disorders (eg, Sjogren syndrome), dysplasia (eg, vulvar intraepithelial neoplasia; Paget disease), vulvar cancer, or contact dermatitis. A clear-cut etiology may not be established in some cases.³

Possible causes of vulvar itching. The most common infectious cause of vulvar itching is vulvovaginal candidiasis. Additional possible causes include trichomoniasis, scabies, and lice. Whereas scabies and lice can be diagnosed based on visual inspection, candidiasis and trichomoniasis cannot be diagnosed without laboratory tests.

Dermatoses can often be distinguished by appearance, although biopsy is the only way to definitively confirm the diagnosis. An online image reference may be helpful.⁴ Lichen sclerosus should be considered when tissue is pale and thinned and vulvar architecture is lost. Lichen simplex chronicus should be considered when hair-bearing skin is thickened and red. Lichen planus is more often associated with pain and burning, and typically there is erythema and superficial erosion of the mucosal skin at the vaginal introitus. Psoriasis is classically described as fiery red vulvar skin. Contact dermatitis is most often seen as erythema in a pattern of contact where a topical product or incontinence protection has come in contact with the skin.

Autoimmune disorders such as Sjogren syndrome may not have visible skin changes but should be considered when a patient has a known diagnosis or is having other systemic symptoms.

Neuropathy more often presents with burning or pain, but itch can also be a neuropathic symptom. In cases without skin findings, infection, or a clear underlying autoimmune condition, neuropathic itch should be considered.

Evaluation of vulvar itching. The most important first steps in evaluation of vulvovaginal itching are obtaining a history from the patient and conducting a thorough physical examination. History should specifically include what products patients have used on the vulvar skin as well as any changes in detergents, soaps, incontinence protection products, environmental exposures, or any recent medication change. Additionally, it is important to identify whether itching is isolated to the vulvar area or widespread, whether the patient is also having burning or pain, and whether there are concurrent systemic symptoms.

Visual inspection of the vulvar skin is critical. The appearance of the skin can often guide clinical diagnosis. Key features to assess include color (erythematous, pale, or no visible changes), texture (thickened or thinned), morphology (raised or flat), and location (keyhole distribution; distribution in area of contact with pads or topical application). The clitoris also should be examined for clitoral phimosis or adhesions. When there are visible skin changes, a photo in the medical record can be invaluable in tracking progression or improvement.

The most important initial laboratory tests are for evaluation of infectious causes such as vulvovaginal candidiasis, trichomoniasis, and scabies or lice. Point-of-care wet mount preparation is not sensitive for these pathogens. Trichomoniasis should be evaluated by a highly sensitive nucleic acid amplification test. Vulvovaginal candidiasis should not be diagnosed simply based on appearance of discharge or report of symptoms. Culture or molecular testing are the definitive modalities. If there are visible ulcers or open sores, herpes should be evaluated with a polymerase chain reaction test of secretions from the lesion. Culture or serologic tests are not recommended. In patients where vulvar itching is part of a systemic pattern of itching and pain, evaluation for causes of neuropathy could include hemoglobin A_{1c}, vitamin B₁₂ level, and a complete blood count.

With any clinical scenario, if there are nonhealing ulcerations or thickened white plaques, a biopsy should be performed to assess for dysplasia or malignancy. Additionally, if a patient has failed any first-line therapy, a biopsy should be considered to rule out dysplasia and aid in treatment planning. Neuropathic itch should not be diagnosed unless a biopsy reveals no dermatologic or neoplastic cause.

For patients without a clear diagnosis, patch testing with an allergist to assess sensitivities to ingredients in personal care products may help identify the cause of symptoms. The North American panel is a collection of patch tests that assesses sensitivity to 65 to 80 common additives in products that could cause a reaction.

Treatment of vulvar itching. Irrespective of the cause, treatment of vulvar itch should emphasize general principles of skin care: limiting use of irritants, hydration of skin, and barrier protection as needed. Practically, this means limiting use of soap in the genital area; avoiding soaps, detergents, and personal care products with fragrances or perfumes; and choosing all-cotton undergarments. The ideal products for skin hydration, such as coconut oil, olive oil, petroleum jelly, and glycerin, have minimal ingredients. These can be applied multiple times daily but should at least be applied

after bathing to seal in moisture. Cream formulations are not ideal for vulvar skin. Barrier protection at night with zinc oxide paste or lanolin and petrolatum ointment can be soothing, although sometimes messy for routine use.

In postmenopausal women, topical estrogen may be a helpful adjunctive treatment for many disorders, although cream formulations can sometimes cause irritation, making a compounded formulation, with minimal ingredients, a better alternative for some. For immediate control of symptoms, topical lidocaine ointment (5%) or gel (2%) may be helpful. These can cause burning and irritation, and an initial trial with a small amount should be performed before widespread application.

Infections should be treated according to clinical guidelines,⁵ as should dysplasia or malignancy.⁶ People with neuropathic itch can be treated with neuromodulating agents such as oral gabapentin.

Lichen simplex chronicus should be treated with general skin-care guidelines and a short-term high-potency topical steroid ointment. A typical treatment plan consists of an initial course of daily use over 1 to 3 weeks, tapering down to every other day for 1 to 2 weeks, and then to one to three times weekly for 1 to 3 weeks, followed by discontinuation. Daily steroid use should be limited to no more than 6 weeks.

Lichen sclerosus and lichen planus should be treated according to American College of Obstetricians and Gynecologists guidelines, with a topical, ultra-potent steroid ointment.⁷ People with lichen sclerosus who use steroids regularly have a lower risk of vulvar squamous-cell carcinoma than those whose use is more intermittent.⁸ Best practice is “regular” steroid ointment (ie, application one to three times/wk), with the minimum steroid potency necessary to control symptoms and to maintain genital architecture. Patients should be counseled that these are lifelong conditions that will require ongoing management. People with autoimmune disorders suspected to be the cause of vulvovaginal itching should be treated according to the same principles, with skin care and the minimum necessary potency and frequency of topical steroids needed to control symptoms. For some, systemic medication to manage the underlying disorder may be the most helpful intervention. For people in whom steroids are not tolerated or where symptoms cannot be controlled with less than daily use, topical calcineurin inhibitor (tacrolimus, pimecrolimus) ointments are steroid-sparing anti-inflammatory interventions that may be helpful.³

Pearl. Evaluation of vulvar itching includes assessment for infectious, dermatologic, and rheumatologic causes. Less is more in treatment of vulvar itching—potential irritants should be minimized, and when possible, topical treatments should be ointment formulations with as few ingredients as possible.

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