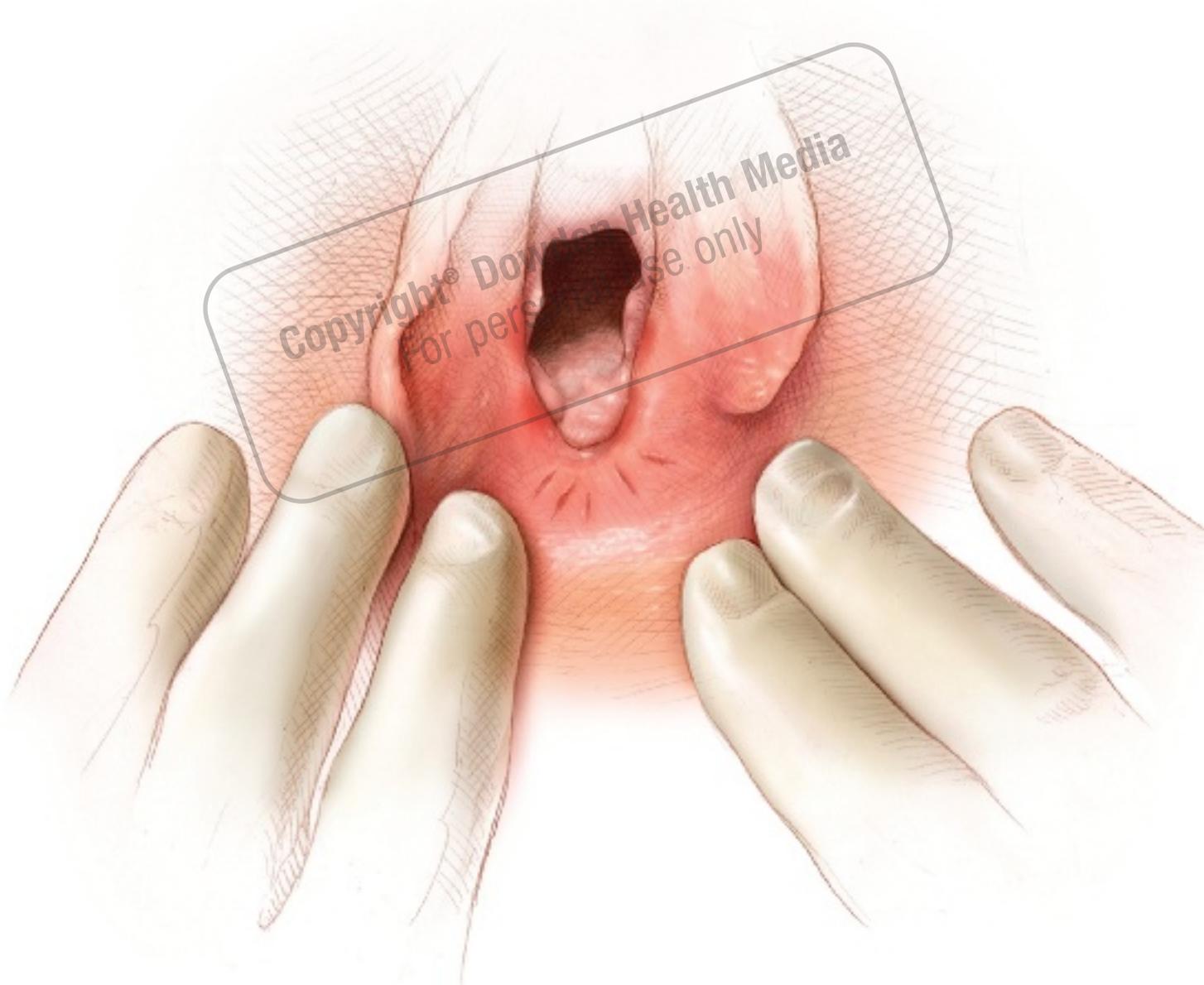


A practical approach to vestibulitis



Women who have vestibulitis have evidence of focal erythema and, sometimes, focal erosion at the junction of the hymen and vestibule. In addition, some patients exhibit vestibular fissures.

and vulvodynia

📌 Draw a few basic distinctions and apply simple strategies to aid your diagnosis and management of these all-too-common conditions

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CASE

No relief, despite multiple therapies

A 20-year-old woman is referred to your practice for evaluation of persistent dyspareunia. She describes the pain as “excruciating” and reports that it occurs with attempted penile insertion.

Her symptoms began 1 year ago when she noted some postcoital soreness at the introitus, as well as external dysuria. The symptoms have become so pronounced that she now avoids sexual intercourse altogether. She experiences similar pain when she inserts a tampon, wears tight jeans, or rides a bicycle. She has no history of recurrent vaginitis.

So far, she has tried, sequentially, topical steroids, vitamin D ointment, topical gabapentin, and oral amitriptyline—without improvement.

What is the differential diagnosis? And what can you do to ease her pain?

Although vulvar pain has many causes, women who have a chronic vulvar pain syndrome generally fall into one of three diagnostic categories (i.e., McKay’s patterns):

- cyclic vulvovaginal candidiasis
- vestibulitis
- essential vulvodynia.¹

In this case, the diagnosis is vestibulitis, which is marked by focal erythema and, in some cases, focal erosion at the junction of the hymen and vestibule. Clinical findings in women who have vestibulitis are often subtle, but can be detected with careful examination.

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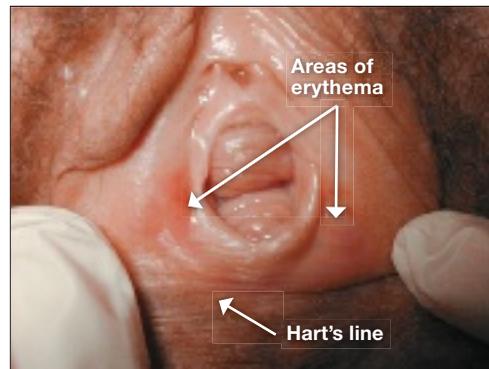
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TABLE How vulvar pain is classified

<p>Generalized Involvement of the entire vulva</p> <ul style="list-style-type: none"> • Provoked (sexual contact, nonsexual contact, or both) • Unprovoked (spontaneous) • Mixed (provoked and unprovoked)
<p>Localized Involvement of a portion, or component, of the vulva, e.g., vestibulodynia, clitorodynia, hemivulvodynia, etc.</p> <ul style="list-style-type: none"> • Provoked (sexual contact, nonsexual contact, or both) • Unprovoked • Mixed (provoked or unprovoked)

International Society for the Study of Vulvar Diseases¹³

FIGURE 1 Physical findings may be subtle



When vestibulitis is suspected, look for areas of erythema or fissuring at the junction of the hymen and vestibule and explore the entire vestibule out to Hart's line.

PHOTO COURTESY OF DAVID SOPER, MD

This article outlines the diagnosis and management of vestibulitis and essential vulvodynia, including a basic classification of vulvar pain (TABLE). In the process, it also sheds light on the tricky diagnosis of cyclic vulvovaginal candidiasis, which can provoke vestibulitis in some cases.

A careful history, focused physical examination of the vulva and vagina, and microscopy of the vaginal secretions are the foundation of diagnosis of any vulvar pain syndrome.

Anatomy of the vulva

The first step in adopting a practical approach to vulvar pain is developing familiarity with vulvar anatomy. I find it useful to divide the vulvovaginal anatomy into three discrete areas:

- vulva
- vestibule
- vagina.

The vulvar integument is keratinized and contains hair follicles and apocrine glands. The epithelium of the vestibule, on the other hand, is similar to the buccal mucosa: non-keratinized and usually moist, with no adnexal structures. This highly innervated area extends from the hymenal ring to Hart's line (FIGURE 1) and is the primary site of concern in women who have a vulvar pain syndrome.

The vagina begins at the hymenal ring and extends proximally to the cervix. The vagina is uniformly normal in patients who complain of chronic vulvar pain unless yeast vaginitis is one of the causes.

Cyclic vulvovaginitis can lead to dyspareunia

Women who have cyclic vulvovaginal candidiasis initially complain of symptoms of yeast vaginitis, e.g., vulvovaginal itching and a cheesy white vaginal discharge. Most women experience infrequent episodes of yeast vaginitis, but those who have cyclic candidiasis relapse after a short course of topical or systemic antifungal therapy. When they relapse, they tend to experience mild irritative symptoms and de novo entry dyspareunia.

Many of these women have been treated with intermittent antifungal medication and antibiotics because their clinician assumed that a bacterial infection was present when the antifungal therapy did not solve the problem. Another challenge in evaluating these women is the inability of point-of-care testing to guide the diagnosis—or the omission of such testing altogether.

The basic profile of these patients remains the same, however: relapsing introital symptoms that are relatively mild but lead to worsening entry dyspareunia, a sign of vestibulitis. The patient may also report postcoital

FAST TRACK

When they relapse, women who have cyclic vulvovaginitis tend to experience mild irritative symptoms and a new complaint of entry dyspareunia

An overlooked and underestimated affliction

As an official entity, the term vulvodynia has been around only 25 years. The International Society for the Study of Vulvar Diseases (ISSVD) defined vulvodynia in 1984 as chronic vulvar discomfort, noting that it is characterized in particular by the patient's complaint of burning, stinging, irritation, or rawness.

Vulvodynia didn't originate in 1984, of course. But its definition was an important first step in identifying a clinical entity that had long been ignored by clinicians, primarily because of their inability to determine a cause, establish a diagnosis, and recommend a specific course of therapy. In addition, the magnitude of the problem was woefully underestimated.

A population-based study of 4,915 women in Boston found that 16% of respondents reported either chronic vulvar burning or pain with contact.¹¹ Hispanic women were more likely than Caucasian and African-American women to acknowledge such a complaint.

Similarly, Goetsch found that 15% of patients in her gynecologic practice had vestibular pain and tenderness on examination.¹²

soreness and burning after micturition when the urine drops onto the vestibule ("splash dysuria"). These symptoms may reflect the presence of small vestibular fissures.

Evaluation can be tricky

The key to evaluation of a patient with these complaints is to schedule her appointment once she has been off therapy for at least 2 weeks and has not used any intravaginal medication during that interval. This drug holiday serves two functions:

- It eliminates adverse reactions to medications from the differential diagnosis.
- It allows adequate evaluation of vaginal secretions, including a reliable vaginal culture for *Candida* species.

During this initial encounter, the exam may well be normal. Ask the patient to grade her vulvovaginal symptoms on a scale of 0 to 10, with 10 representing the worst symptoms experienced and 0 being a complete lack of symptoms. Many patients at the initial encounter will grade their symptoms as minimal, in the range of 2 to 3 out of 10.

If the exam is normal, ask the patient to return for a repeat evaluation when her symptoms reach 8 or greater on the 10-point scale, and instruct her not to self-treat with a

topical or systemic antimicrobial. When she returns, vulvovaginal candidiasis can usually be diagnosed by microscopy and confirmed by vaginal yeast culture to rule out non-*albicans Candida*. Patients who have recurrent vulvovaginal candidiasis tend to flare premenstrually.

Treatment may be lengthy

Treatment of cyclic vulvovaginal candidiasis involves an initial course of oral fluconazole (150 mg every 3 days for three doses), followed by suppressive therapy with weekly fluconazole (150 mg).² This treatment is effective in more than 90% of cases, easing the cyclicity of the patient's symptoms. However, she may be left with some residual vestibulitis and discomfort with coitus, which may take as long as 2 months to resolve. Biweekly application of a topical steroid of modest strength may help, such as triamcinalone 0.1% ointment.

Vestibulitis is most common among young women

Women who have vestibulitis tend to be premenopausal and young—typically, in their 20s. They usually complain of worsening pain with coitus, as well as pain with tampon insertion and tenderness when riding a bike or wearing tight jeans, suggesting that touch to the vestibule provokes the pain.

Despite these other symptoms, however, it is the inability to have vaginal sexual intercourse that usually brings the patient to the physician. I generally ask a simple question: "If you did not engage in sexual intercourse, would you be normal?" In other words, would she avoid the pain if she avoided touch to the vestibule? Patients who have vestibulitis inevitably answer, "Yes!"

"The eye doesn't see what the mind doesn't know"

This caveat is important as you examine the patient (FIGURE 1, page 54). When vestibulitis is present, clinical findings are often subtle; careful examination, however, can elicit the source of the tenderness. Inspect the vulvar vestibule carefully circumferentially, and



Young women who have vestibulitis tend to complain of progressively worsening pain with coitus as well as other symptoms that suggest that touch to the vestibule provokes the pain



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Facilitating choice of appropriate and acceptable contraceptive methods

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3. Develop strategies for counseling patients about appropriate and acceptable contraceptive methods.

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SUPPLEMENT TO
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IMPROVING CONTRACEPTIVE SUCCESS: Facilitating choice of appropriate and acceptable contraceptive methods

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exert pressure at the junction of the hymen and vestibule using a moistened cotton swab.

As I mentioned earlier, women who have vestibulitis have evidence of focal erythema and, sometimes, focal erosion at the junction of the hymen and vestibule. They also experience exquisite tenderness as the cotton swab presses against this junction, with the pain most intense in the 3 to 9 o'clock region. Yeast vaginitis should be ruled out by microscopy and yeast culture.

Most patients have avoided coitus for some time before they see a physician, so vestibular fissures may not be obvious. The diagnosis of vestibulitis can be based on Friedrich's criteria:

- severe pain at the vestibule upon touch or attempted vaginal entry
- tenderness to pressure localized within the vulvar vestibule
- physical findings confined to vestibular erythema of various degrees.³

Medical therapy is ineffective

Vestibulitis is a disease that renders the vestibular epithelium less resilient and more susceptible to fissures upon contact. For this reason, medical therapy is ineffective.

Although a 6-week trial of a topical steroid (triamcinalone 0.1% or desoximetasone 0.25% ointment twice daily) is commonly prescribed, it is rare for a patient to have a response sufficient to restore pain-free coitus.⁴

Some patients are adept at applying topical 5% xylocaine ointment to the vestibule 15 to 30 minutes before coitus to ease the discomfort associated with intercourse. Another alternative is injection of interferon into the vestibule, which can limit the percentage of patients who require vestibulectomy by almost 50%. However, interferon must be injected into the vestibule three times weekly for 4 weeks.⁵ Side effects include the pain of the needlestick and systemic fever and flu-like illness from the interferon.

Vestibulectomy is the treatment of choice

Multiple studies suggest 61% to 94% improvement or cure after vestibulectomy.⁶ A key predictor of surgical failure is constant vulvar pain in addition to pain with coitus.⁷ Such patients should probably be managed by an expert.

This supplement was sponsored by SciMed and supported by an educational grant from Schering-Plough.

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FIGURE 2 Excision of the vestibule



Vestibulectomy involves removal of the entire vestibule except the part just lateral to the urethral meatus.

PHOTO COURTESY OF DAVID SOPER, MD

Before deciding on vestibulectomy, confirm that the patient has had persistent symptoms for more than 6 months. The reason? Spontaneous remission does sometimes occur within the first 6 months of vestibulitis.

In the OR, after induction of anesthesia, apply downward and lateral pressure to the posterior fourchette to bring small fissures to light. Vestibulectomy entails removal of the hymen and vestibular skin out to Hart's line. This usually means removal of all of the vestibule except the part just lateral to the urethral meatus (**FIGURE 2**).

Once this tissue is removed, mobilize the vaginal epithelium, as in posterior colporrhaphy, and advance it to cover the surgical defect.

Postoperative immobilization is required

After surgery, the patient should expect to be somewhat immobilized for 2 weeks and to require narcotic analgesia during this time. Healing should be apparent by 6 postoperative weeks, but the suture line at the introitus may still be slightly tender. I usually recommend that the patient avoid coitus until the 3-month postoperative visit. At this visit, the introitus should no longer be tender. If this is the case, the patient can be given the green light for coitus.

In older women, look for genital atrophy

Postmenopausal women are remaining sexually active in ever-increasing numbers. When dyspareunia occurs in this population, the cause is

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usually genital atrophy. Long-term treatment with systemic or topical estrogen will usually ease coital pain. Surgery is not a mainstay of treatment of dyspareunia in postmenopausal women. (For more on this population, see "Postmenopausal dyspareunia: A problem for the 21st century," by Alan Altman, MD, in the March 2009 issue of OBG MANAGEMENT at www.obgmanagement.com.)

Essential vulvodynia is more common among older women

Women who have essential (dysesthetic) vulvodynia tend to be older and postmenopausal, although premenopausal women are sometimes affected. These women complain of chronic, unremitting, diffuse vulvar burning that is usually not limited to the vestibule. They may have similar symptoms in the region of the urethra and rectum. In general, dyspareunia is not a major problem.

In women who have essential vulvodynia, the pelvic examination is absolutely normal other than the presence of mild genital atrophy in the postmenopausal patient. There is no evidence of provoked tenderness and no focal erythema or erosion.

Treatment is medical

Women who have essential vulvodynia are not candidates for surgery. Optimal treatment of this neuralgia entails the use of low-dosage amitriptyline (25 to 50 mg nightly) or other antidepressants (e.g., venlafaxine, sertraline, duloxetine).⁸ I prefer low-dosage sertraline (25 mg daily) because it has a low incidence of side effects at this dosage.

Less is more in the pharmacotherapeutic management of essential vulvodynia. Women who do not respond to a lower dosage tend not to respond to a higher one, either.

Another option is gabapentin. It usually is administered orally but was recently studied in a topical formulation, both of which appear to be effective.^{9,10}

Counsel the patient that improvement, not cure, is the therapeutic goal with these drugs and that her response will be gradual, with improvement usually noticed after 2 weeks of therapy, continuing until her 6-week revisit. At that time, the dosage can be maintained or increased, depending on the patient's response. If the patient is happy with that response, treatment should continue for 4 months, at which point she can be weaned from therapy. Relapse is uncommon.

CASE: OUTCOME

Upon examination, the patient exhibits focal erythema at the junction of the hymen and vestibule. Palpation of these areas with a moist cotton swab causes extreme tenderness, recreating the patient's introital pain. Microscopy of the vaginal secretions is normal, and a vaginal yeast culture is negative.

Because she is an excellent candidate for vestibulectomy, the patient undergoes resection of the vulvar vestibule from the hymenal ring to Hart's line, from the 1 o'clock to 11 o'clock positions, and recovers slowly.

At her 6-week postoperative checkup, the surgical site is healed but tender. At her 3-month visit, the introitus is no longer tender, erythema has resolved, and she resumes coital activity. 🔄



When the patient has essential vulvodynia, the pelvic exam is absolutely normal except for the presence of mild genital atrophy in postmenopausal women

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