

## The Treatment of Vulvodynia After Menopause

### Questions and Answers with Michael Krychman, MD

*Dr. Krychman is clinical associate professor of obstetrics and gynecology at the University of Southern California, medical director of sexual medicine at Hoag Presbyterian Hospital, and director of the Southern California Center for Sexual Health and Survivorship Medicine in Newport Beach.*

**NVA: Please describe the menopausal transition.**

**Dr. Krychman:** Women enter the perimenopausal period when their menstrual cycles become irregular and levels of follicle-stimulating hormone (FSH) start to increase. Menopause refers to the period during which menstrual flow ceases for one year, after which women are considered postmenopausal. For women without a uterus (but intact ovaries), menopause may be identified by a high FSH level. Perimenopause can begin as early as 40, but women typically recognize symptoms in their mid- to late forties, often many years after the perimenopausal period actually begins. The duration can be 10 years or more, although for some women it may be less.

During this time, production of the reproductive hormones declines, resulting in a wide range of symptoms such as hot flashes, mood changes, vaginal dryness, painful intercourse, changes in sleep patterns, fatigue, and even cognitive and memory alterations.

**NVA: How does menopause affect women's genital tissue?**

**Dr. Krychman:** Postmenopausal decreases in hormone levels result in atrophy (e.g., thinning and inflammation of the vulvovaginal tissue), reduced genital blood flow and lubrication, and

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## Physical Therapy: Universal Treatment for Sexual Pain

### By Andrew Goldstein, MD, Caroline Pukall, PhD, and Irwin Goldstein, MD

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**T**here are two main types of pelvic floor dysfunction: *hypotonia*, in which the muscles are too loose, and *hypertonia*, in which they are overactive. The latter is the primary problem in sexual pain disorders. That's why physical therapy is critical to the successful treatment of most causes of sexual pain. It is essential that your doctor evaluate the strength and tone (tightness) of your muscles

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increased vaginal pH (which can increase women's risk of urogenital infection or tissue trauma).

## **NVA: How common is vulvovaginal atrophy? What symptoms do women report?**

**Dr. Krychman:** Vulvovaginal atrophy is estimated to affect up to 40 percent of postmenopausal women (see Krychman 2010 for references). Atrophy causes the vulvovaginal tissue to appear thin, pale, smooth and shiny. It may also appear brittle, inflamed and even red. As a result, women report symptoms such as itching, burning, dryness, irritation and pain. In addition to painful intercourse and decreased sexual satisfaction, women may experience frequent urinary tract infections or discomfort with routine activities, such as sitting or crossing their legs. These symptoms are often progressive and are unlikely to

resolve without treatment.

## **NVA: How does vulvovaginal atrophy affect the severity and constancy of vulvodynia?**

**Dr. Krychman:** Although no scientific research has been conducted on this topic to date, I find that the conditions often overlap. As such, it is important that health care providers conduct a comprehensive history and pelvic/genital examination (including a cotton-swab test, intravaginal pH measurement, microscopy and vulvoscopy) to assess women's symptoms and identify which condition began first. Changes that occurred while women were taking (or stopped taking) hormone therapy should be noted. I find that the onset of vulvodynia typically occurs before the menopausal transition, although vulvar symptoms may worsen during this time. Compared to women with vulvovaginal atrophy alone, vulvodynia patients' pain response to the cotton-swab test may be more dramatic and the erythema (redness) may be more localized. Careful assessment and comprehensive treatment of both disorders is essential to achieving substantial pain relief and improved quality of life.

## **NVA: What is the first step in treating vulvovaginal atrophy?**

**Dr. Krychman:** Current treatment guidelines recommend the combined use of: (i) minimally absorbed, vaginally administered estrogen, (ii) non-hormonal moisturizers and lubricants, and (iii) the maintenance of sexual activity. Several formulations of local vaginal estrogen therapy are commercially available, including creams, tablets and rings. All have proven efficacy in improving the symptoms of vaginal atrophy, restoring the vaginal lining and minimizing painful intercourse.

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The National Vulvodynia Association is a nonprofit organization that strives to improve women's lives through education, support, advocacy and research funding. The NVA is not a medical authority and strongly recommends that you consult your own health care provider regarding any course of treatment or medication.

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## Menopause

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### **NVA: What are advantages and disadvantages of different estrogen formulations?**

**Dr. Krychman:** Vaginal estrogen rings release the hormone over a period of three months, which may be advantageous for women with decreased mobility. Some women, however, experience difficulty inserting the ring, ring displacement during bowel movements and a “foreign body” feeling in the vagina associated with increased vaginal discharge. Other women prefer the tablet form because the dose is very low, and it is bioidentical in chemical composition, easily applied with a biodegradable applicator and not associated with vaginal leakage. Some women opt for a cream because it is inexpensive, soothing, can be directly applied to both the vagina and vulva, and the dose can be easily adjusted to meet patients’ individual needs.

### **NVA: Which of these options do you recommend for women with vulvodynia who are experiencing menopause-related vulvovaginal atrophy?**

**Dr. Krychman:** Although no randomized controlled trials have compared their effectiveness, my recommendation for women with vulvodynia is minimally absorbed, vaginally administered estrogen cream. The cream is easily applied to the vulva and can also be inserted into the vagina to treat atrophic changes. Many patients prefer using only one medication, while others prefer the intravaginal estrogen tablet for vaginal concerns and locally applied cream to address vulvar symptoms.

### **NVA: How long do women with vulvovaginal atrophy typically need to use vulvovaginal estrogen? What methods do you use to monitor its effects? What are the risks?**

**Dr. Krychman:** Unfortunately there isn’t a “one size fits all” answer to this question. The length of

time that women need to use vulvovaginal estrogen depends on their symptoms and the degree to which they are troubled by them. As with most treatment, we start conservatively, closely monitor progress and adjust treatment as needed. The goal is to use the lowest dose possible to maintain a therapeutic effect. Women who remain symptomatic may continue treatment for many years. Women who use local vaginal hormones, however, should be evaluated regularly. Although there is no standard recommendation for follow-up, if women experience any vaginal bleeding, a comprehensive evaluation that includes a transvaginal ultrasound and endometrial biopsy is warranted.

### **NVA: Do you utilize topical testosterone treatment as well?**

**Dr. Krychman:** Testosterone, which also declines over the menopausal transition, is important in maintaining vulvar health. If women do not achieve significant relief with estrogen therapy alone, I often add topical testosterone to their treatment regimen. Other specialists choose to start with an aggressive combination of compounded estrogen and testosterone that is applied topically to the vulvar tissue.

### **NVA: Which nonhormonal treatments help to relieve symptoms?**

**Dr. Krychman:** Intravaginal moisturizers (e.g., polycarbophil, oil-based capsules), used once or twice weekly, may be helpful in maintaining vaginal moisture and pH balance. Water-based lubricants without additives may also be beneficial. Careful attention should be exercised, however, because some products contain additives, bacteriocides, spermicides and warming/flavor components that may be irritating to atrophic or sensitive vulvovaginal tissue.

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Health care providers should advise their patients to carefully read labels for harmful ingredients.

## **NVA: Why is maintenance of sexual activity during the menopausal transition so important?**

**Dr. Krychman:** Some studies demonstrate that postmenopausal women who participate in regular sexual activity during the menopausal transition report fewer symptoms of vaginal atrophy and have less evidence of atrophy on vaginal examination. If intercourse is uncomfortable or painful, we encourage couples to engage in non-penetrative sexual activity to maintain intimacy while we work to effectively treat the underlying symptoms.

## **NVA: Once the vulvovaginal atrophy has been addressed, which vulvodynia treatments do you utilize?**

**Dr. Krychman:** I use a comprehensive treatment plan that includes a variety of treatment modalities, such as topical and systemic medications, interventional techniques, pelvic floor muscle therapy and sexual counseling, as well as diet, vulvar hygiene and lifestyle modification. Because studies demonstrate that there are multiple vulvodynia subsets caused and maintained by different underlying pathologies, the key is to individualize patients' treatment plans.

## **NVA: Have you found that certain treatments are more (or less) effective for postmenopausal women with vulvodynia?**

**Dr. Krychman:** Although this has not been studied, I do think that hormonal therapy is essential for postmenopausal women. Estrogen combined with testosterone appears to be essential in maintaining vulvar health, especially during the postmenopausal period, when we see a decline in those hormones. Otherwise, treatment options utilized for postmeno-

pausal women with vulvodynia do not significantly differ from those used to manage the condition in premenopausal women. Again, an individualized approach is essential to the successful treatment of all women with vulvodynia, regardless of their age.

## **NVA: What other issues specific to the postmenopausal period play a role in effectively treating vulvodynia?**

**Dr. Krychman:** In addition to delineating the biological factors at play, I feel that it's very important to address psychosocial stressors that can contribute to a woman's ability to cope with chronic vulvar pain. During the postmenopausal period, many women experience empty-nest syndrome, changes in sexual libido and altered work schedules. Relationship stress and the emergence of chronic medical illnesses during this time can also impact women's general health. A multimodal approach that addresses both the biological and psychosocial issues is essential.

## **NVA: What advice do you have for postmenopausal women suffering from vulvodynia?**

**Dr. Krychman:** I think it is important for both pre- and postmenopausal women with vulvodynia to know that they are not alone and that they need not suffer in silence. Safe, effective therapies are available for the treatment of both vulvodynia and vulvovaginal atrophy. The need for an individualized, multifaceted, comprehensive treatment approach cannot be emphasized enough. It may take some time, but women can achieve significant pain relief and improved quality of life by working as a team with their medical providers.

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# Getting the Most Out of Your Medical Care

*This article is excerpted from NVA's updated self-help guide for women with vulvodynia, I Have Vulvodynia – What Do I Need to Know? To obtain a copy, please visit [www.nva.org/new\\_patient\\_guide.html](http://www.nva.org/new_patient_guide.html), or contact NVA's administrator, Gigi Brecheen, by e-mail ([gigi@nva.org](mailto:gigi@nva.org)) or phone (301-949-5114). Health care providers can also order copies of this and other NVA patient guides by contacting Ms. Brecheen.*

It can be very difficult for women with vulvodynia to discuss all of their concerns at one doctor's appointment. There are, however, some strategies you can employ to maximize the value of each visit.

First, it's essential for you to find a knowledgeable, caring health care provider to work with you and other members of your health care team. If your current provider isn't experienced, ask him/her for a referral to a specialist. The NVA also maintains a national database of medical professionals who treat vulvar pain disorders. If there isn't a vulvodynia expert in your area and you're unable to travel, ask your provider if he/she is willing to learn about the condition and its treatment. You can request a packet of information to give to your provider using NVA's contact form, found at [www.nva.org](http://www.nva.org).

The importance of educating yourself about vulvodynia cannot be emphasized enough. Knowledge is power, and in order to effectively advocate for yourself, it's critical that you learn as much as you can about the condition. NVA's website has nearly 50 issues of its newsletter, featuring expert articles on the diagnosis and treatment of vulvodynia. These issues of *NVA News*, plus our online patient tutorial, provide detailed information about different treatments. You can also read recent medical journal articles and books by vulvodynia experts, and subscribe to NVA's free electronic newsletter. All of these resources are available at [www.nva.org](http://www.nva.org), by clicking on the 'Patient Services' tab.

## **How to Communicate Effectively with Your Health Care Provider**

Effective frequent communication with your health care provider(s) will increase your chances of obtaining the quality medical care you deserve. Fol-

lowing are suggestions for establishing a productive relationship with your provider.

### *Prepare for Your Appointment*

It is important to take some time to prepare for each office visit. Well in advance of your appointment, transfer or fax relevant medical records, films and lab results to your new provider. You can also request forms that he/she needs you to complete in advance, so that you won't have to rush to complete them in the waiting room. Consider keeping a pain diary for several weeks or months prior to your appointment and/or complete the International Pelvic Pain Society questionnaire. (You can download a pain diary at <http://learnpatient.nva.org/pdf/PainDiary.pdf> and the questionnaire at <http://www.pelvicpain.org/resources/handpform.aspx>.) Keep a notepad handy, write down questions as they come to you and bring the list of questions to each appointment. You may also want to ask a family member or friend to accompany you to the office visit to help you recall the provider's instructions, especially if it's your first appointment. You can also bring a tape recorder, and if your provider doesn't mind, record the session.

During your appointment, remember to be concise, but give details. Refer to your written questions. Take notes and ask for clarification if you don't understand something. Let your provider know if you need more time to discuss your concerns. If he/she can't dedicate more time during your appointment, schedule a follow-up visit or phone call, or ask if you can speak further with the nurse or physician assistant. Ask why certain lab work or tests are necessary and make sure the provider contacts you

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to explain the results. It's also helpful to ask your clinician about any office policies or procedures. For example, how should you handle prescription refill requests and referrals? If narcotic pain medications are prescribed, some offices require a written agreement and routine drug screening. Knowing office procedures ahead of time can prevent future misunderstandings. Finally, ask your clinician to communicate with other members of your health care team and supply him/her with their contact information. Because people with chronic pain are often under the care of multiple specialists, it is important for the medical team to collaborate. Make sure that a summary of each visit is sent to all members of your health care team.

### *Issues to Discuss During Your Appointment*

Chronic pain is complex and can affect you in many ways. Your ability to work, sleep, maintain intimacy with your partner, take care of your children and participate in social activities may be affected. Since your clinician cannot "see" the intensity of your pain, it is up to you to describe your symptoms and how they affect your life. You also have to disclose your complete medical history, including a list of all your medical conditions, as well as prescription and non-prescription medications. During your visit, you should describe the location(s) of your pain to your provider. Is the pain localized to one area of the vulva or is it more diffuse, affecting several vulvar areas? Does the pain feel superficial or deep and penetrating? Discuss whether it travels or radiates, and whether you experience pain in other areas of your body. In addition to the location of your pain, you should describe the pain quality, i.e., what it feels like. Women with vulvodynia use a variety of pain descriptors including shooting, sharp, burning, stabbing, throbbing, tender, sore, cutting, searing, knife-like and raw. Next, describe the pain intensity and give your clinician a numeric rating from 0 (no pain) to 10 (severe pain). Discuss your pain pattern, duration and frequency. For example, is your pain

constant or intermittent? Does it start gradually or become intense suddenly? Further, discuss which activities or treatments help to relieve (or increase) your pain. If your usual pain or "pain flares" are accompanied by other symptoms, such as fatigue, fever, weakness or numbness, disclose this as well.

Addressing the emotional, social and sexual effects of your pain is also very important. Discuss how chronic pain affects your daily functioning and emotional well-being. For example, are you unable to sit or walk because of the pain? Does it keep you awake at night? Are you unable to exercise? Be specific about how the pain affects your mood, relationships and sexual health, and tell your clinician if you think it would be beneficial for you to see a therapist who counsels patients with chronic illness.

Educating yourself about different vulvodynia treatments will better equip you to discuss options with your provider. Chronic pain, including vulvodynia, is often managed with a combination of approaches, such as medication, physical therapy and lifestyle changes. You will want to ask your provider to explain what treatment options are available to you. Inquire about the most common side effects, risks associated with a particular treatment and what you can read to help you understand its benefits. If you're not consulting a specialist, ask if a referral for treatment would be beneficial. In addition to medical treatment, ask your provider what you can do to help yourself feel better. Finally, in addition to recording information in a pain diary prior to your first appointment, use it to track your progress between visits.

### **Seeking a Second Opinion**

Never hesitate to seek a second opinion, even if you feel comfortable with your provider's expertise. In fact, medical professionals seek multiple opinions

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for their own health issues, and most will expect you to do the same. This is especially true for a condition like vulvodynia, because it lacks evidence-based diagnostic and treatment guidelines. Remember, it is *your* health at stake.

There can be several reasons to seek another medical opinion. Some women don't have a choice, because they are still not diagnosed after consulting several physicians. Since pain tends to be undertreated by the medical community, you have to be sure that your provider is taking your pain seriously. Additionally, no single treatment works equally well for all women with vulvodynia. For example, one woman may find relief with a topical cream, while another may need a combination of oral medication and physical therapy. Based on your symptoms, you and your medical professional will develop an individualized treatment plan. Health care providers differ in their approach; for example, some prefer to start with conservative therapies, while others tend to suggest more aggressive treatments. Consulting another provider can either reassure you that you have been offered the most up-to-date, appropriate treatment or convince you to try a different treatment, perhaps with fewer side effects.

It is also possible that you are not satisfied with your provider's care and wonder if you can find better care with someone else. If your clinician tells you that your pain is 'all in your head' or that there is nothing more he/she can do for you, it's important to seek care from another medical professional. If you have difficulty obtaining timely appointments, your provider is unwilling to work with other members of your health care team, he/she is dismissive of your concerns or lacks compassion, it may be in your best interest to find another clinician to manage your care. If you're spending more time with the office staff than your provider, your phone calls and questions go unanswered, or you find yourself having to repeat basic information at each appointment, these are additional red flags. If you live in a rural area or cannot choose your provider, such as with an HMO, it can be valuable to see an expert for an initial evaluation, even if it means traveling out of town. The expert sends a report with treatment recommendations to your local provider.

Regardless of where you are in your quest to obtain effective medical care for your vulvodynia, we hope that this article has provided you with some helpful advice that you can utilize in future appointments. ■

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## Physical Therapy

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or refer you to a physical therapist with an expertise in women's health. The studies bear this out. In one study of women with chronic vulvar pain who received physical therapy, 71 percent said their pain decreased by more than half, 62 percent said their sexual life improved, and half said their overall quality of life improved (Hartmann 2001). Other studies found similar or even better results (Goldfinger 2009, Gentilcore-Saulnier 2010).

If you're too tense to even begin physical therapy,

ask your doctor for a prescription for a medication like diazepam (Valium) to take before your therapy session in order to reduce anxiety and help relax your muscles. Your doctor can even give you a prescription for diazepam vaginal suppositories, which you can have filled at a compounding pharmacy. Taking the medication in this way limits side effects while focusing the medication's relaxing effects on the muscles that most need them.

### **The Physical Therapy Examination**

When you see a physical therapist, she should first

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conduct a full medical history and examine you. This examination involves observing how you walk, sit, lie and move; assessing your muscle strength, tone and endurance; and evaluating the range of motion of your joints and ligaments. The physical therapist should also check the alignment of your spine, pelvis and neck for any abnormalities (Rosenbaum 2009). Such structural abnormalities pull the muscles and ligaments attached to bone out of alignment, forcing other muscles to compensate. Numerous abnormal musculoskeletal conditions are associated with vulvodynia and pelvic floor dysfunction, including: decreased mobility of the spine; misalignment of the sacrum and the pelvis (sacroiliac dysfunction); a tilted pelvis, which can be caused by uneven leg lengths, muscle contractions around the hips, or a misaligned spine (pelvic obliquity); and misalignment of the pubic bones, usually because of trauma from childbirth. Even chronic low back pain or hip pain can lead to overly tight pelvic muscles simply by changing the way you walk and move.

The physical therapist will also conduct an internal exam to assess the strength, mobility and tone of your pelvic muscles. She will carefully insert a finger into your vagina without touching the vestibule. She will then press on each muscle of the pelvic floor to see if it is in spasm and to identify any knots, trigger points or tender points. She will ask you to contract (squeeze) your muscles and see how long you can hold that contraction. She will then see if you can relax your muscles. She will also palpate (gently press) the pudendal nerve and the pelvic organs to look for tenderness, evaluate mobility and check that they are properly located.

### What Do I Have?

While you may have already been diagnosed with vulvodynia, your PT may diagnose another con-

dition as well. The terms may vary – pelvic floor dysfunction, levator ani syndrome, pelvic floor tension myalgia, vaginismus, anismus, coccydynia, sphincter dyssynergia, pelvic floor spasm or a shortened pelvic floor – but they all describe the same condition: too-tight, clenched, sometimes-spasmed muscles. We typically use the term *pelvic floor dysfunction* and will refer to it by the acronym “PFD” throughout the rest of the chapter.

### The Physical Therapist’s Tools

Physical therapists use numerous tools and treatments to relieve the tightness and spasms of the pelvic floor muscles (or to strengthen pelvic muscles as needed). One of the most basic is education. Educating you about your pelvic and structural anatomy (and malfunctions in that anatomy) can help you feel more in control of your situation, which can help reduce pain – or, at the very least, your perception of the pain. Other tools and methods your therapist may use are described below.

#### *Pelvic Floor Surface Electromyography (sEMG) Biofeedback*

Biofeedback is a process in which you learn to control autonomic functions such as tensing or relaxing smooth muscle (often not under your direct control), changing blood flow and even dilating blood vessels. You can learn this control by seeing the muscles at work thanks to small electrodes that transmit electrical signals from the muscles to a screen. Viewing the feedback on the screen helps you learn the motions and feelings required to control the activity voluntarily.

Pelvic floor sEMG is used to assess the electrical activity and tone of your pelvic muscles during the initial evaluation by a physical therapist. The therapist also uses it to treat PFD. You lie on the

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table, covered with a sheet or robe. The therapist places an internal sensor within your vagina and/or stick-on sensors on your abdomen. (If you prefer to put the probe into your vagina yourself, just let the therapist know.) The sensors monitor the electrical activity of the muscles, transmitting it onto the screen in the form of a graph. You can see the graph change as you tighten and relax your muscles. Over time, you learn how to elicit the muscular changes without looking at the screen.

Each session lasts about 50 minutes, but you will also be given exercises to do at home. Studies find this combination reduces the pain of vulvodynia in at least half of all women. If you don't do the home-based exercises along with the weekly therapy, sEMG doesn't work nearly as well (Glazer 1998).

### *Myofascial Release*

The fascial system is a sheath of connective tissue that covers the organs, bones, muscles, and nerves (every internal structure of your body) like a single sheet of cling wrap. In a healthy system, the sheet moves with the underlying organs, muscles and other structures. But trauma, inflammation, scarring and even poor posture can cause the fascia to “stick” to underlying structures, reducing flexibility and stability.

In myofascial release, the physical therapist stretches and massages the muscles (“myo” means muscles) and fascia to relax and lengthen the pelvic floor. Myofascial release increases blood flow to the targeted areas. The extra oxygen and nutrients from the increased blood flow help heal the tissue.

### *Myofascial Trigger Point Release*

In some instances, you may have trigger points, or extremely tender nodules within a tight band of muscle. These nodules occur as a result of overuse,

trauma or inflammation. Muscles with trigger points are usually contracted, weak and hypertonic with limited range of motion. You may not even know that a trigger point is causing your pain until the physical therapist presses on it.

Physical therapists employ a variety of manual therapies to release and lengthen the muscle, using their fingers, knuckles or even elbows to apply direct pressure on the nodule and surrounding muscle. Your doctor can also help. Physicians can inject anesthetics such as lidocaine directly into the trigger points to reduce tenderness so that the physical therapist can apply more stretching pressure without causing severe pain. In addition, an injection of botulinum toxin (Botox), which temporarily paralyzes muscle, can help, enabling the physical therapist to stretch the muscle more easily so it returns to its original length.

### *Connective Tissue (Visceral) Manipulation*

Here, gentle massage is used to release adhesions and spasms of the ligaments and organs in the abdomen and pelvis to return them to their natural position. About one-third of physical therapists use this technique for women with Provoked Vestibulodynia (aka vulvar vestibulitis syndrome) and Generalized Vulvodynia, with studies finding the approach improves symptoms by 71 percent and sexual function by 62 percent (Hartmann 2007).

### *Neural Mobilization*

This form of physical therapy uses various massage techniques to stretch muscles, ligaments, fascia and scar tissue to release trapped nerves that may cause neuropathic pain.

### *Joint Mobilization*

With this approach, the therapist applies pressure

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to the pelvic joints and surrounding soft tissue to return normal movement and reduce pain. The pain may be the result of an abnormally tipped pelvis, unusual pressure on the pelvic joints, loss of range of motion in the hip joint, or one leg being longer than the other.

### *Spinal Core Stabilization*

If you've ever taken a Pilates class or worked with an exercise trainer to stabilize your core, then you get the idea of spinal core stabilization. The goal is to strengthen the spinal, gluteal and abdominal muscles to restore balance and strength at the pelvic base, which supports the rest of the trunk. A weak core can lead to bad posture, in turn putting stress upon joints, muscles and nerves, leading to inflammation and pain. Expect numerous exercises – including the ubiquitous abdominal crunches – to improve your core strength. It is important, however, that you do Pilates with a very experienced instructor because if done improperly, the exercises can cause spasm of the pelvic floor muscles.

### *Pelvic Floor Retraining*

This approach focuses on the pelvic floor muscles themselves. Therapists use a variety of techniques and exercises, including Kegels (in which you clench and release the muscles that control the flow of urine) to strengthen pelvic floor muscles; dilators and vibrators to relax and stretch perineal and coital muscles; and sEMG biofeedback to loosen overly tight muscles and improve overall muscular control.

### *Electrical Stimulation*

This technique uses electrical current to stimulate muscles and improve their responsiveness. For sexual pain, the stimulator probe may be inserted into the vagina or the stimulators may be placed on the pelvis. It doesn't hurt; you just feel a slight, fairly pleasant buzzing sensation.

### *Therapeutic Ultrasound*

In this procedure, an ultrasound wand uses sound waves to provide deep heat to injured tissues, such as those damaged during childbirth. The heat stimulates blood flow, improving healing.

### **Bottom Line**

As we said at the beginning of this chapter, physical therapy is an important component of any treatment plan for painful intercourse, regardless of the cause. It's not a quick-fix solution, however; it will take time to work, and you have to do your homework! Together with quality medical care, physical therapy can improve your pain and sex life.

*Editor's Note: You can help the NVA by purchasing this book from Amazon through NVA's web site. Just click on the book cover located at [www.nva.org/book\\_list.html](http://www.nva.org/book_list.html), proceed with your purchase and Amazon will donate a percentage of your total purchase price to the NVA. Additionally, the authors are generously donating 25 percent of book sale proceeds to the NVA.*

### **References**

Gentilcore-Saulnier E, McLean L, Goldfinger C, Pukall C, Chamberlain S. Pelvic Floor Muscle Assessment Outcomes in Women with and without Provoked Vestibulodynia and the Impact of a Physical Therapy Program. *J Sex Med.* 7 (2010): 1003-1022.

Goldfinger C, Pukall CF, Gentilcore-Saulnier E, McLean L, Chamberlain S. A Prospective Study of Pelvic Floor Physical Therapy: Pain and Psychosexual Outcomes in Provoked Vestibulodynia.

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## NIH Funds New Clinical Trial

In March 2011, the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) awarded its first vulvodynia research grant of the year to Candace Brown, PharmD, MSN, David Foster, MD, MPH, and Gloria Bachmann, MD, MMS, who will investigate the effectiveness of oral gabapentin in reducing the painful symptoms of Provoked Vestibulodynia (PVD, aka vulvar vestibulitis syndrome). Although gabapentin was originally indicated for the treatment of epilepsy, studies have shown that it can reduce the severity and constancy of neuropathic pain, muscle spasm and anxiety. Dr. Brown is professor in the departments of obstetrics and gynecology, pharmacy and psychiatry at the University of Tennessee Health Sciences Center in Memphis. In addition to serving as a longtime member of NVA's Medical-Scientific Advisory Board, Dr. Foster is professor of obstetrics and gynecology at the University of Rochester Medical Center in New York. Dr. Bachmann, interim chair and professor of obstetrics and gynecology at the University of Medicine and Dentistry of New Jersey, also serves as the associate dean for women's health at Robert Wood Johnson University Hospital.

This 16-week, randomized, double-blind, placebo-controlled, crossover study of 120 women aims to

determine if PVD patients experience less vestibular pain with tampon insertion and during intercourse when treated with gabapentin (up to 3600mg/day) compared to a placebo (sugar pill). Each study participant will serve as her own control, meaning that she will take gabapentin first, followed by a wash-out period, and then a placebo (or vice versa). The study also aims to identify predictors of treatment success and differentiate PVD subtypes caused or maintained by different underlying mechanisms. These include abnormalities in central nervous system pain processing, pelvic floor muscle dysfunction and dysregulation of the autonomic nervous system, which controls involuntary functions such as heart rate and digestion. The researchers' long-term goal is to determine the underlying pathophysiologic mechanisms of PVD, use this knowledge to develop evidence-based differential diagnoses of PVD subtypes and then individualize treatment for each subtype.

The three enrollment sites are located in Rochester, NY; New Brunswick, NJ; and Memphis, TN. To learn more about the study, or to participate, visit <http://clinicaltrials.gov/ct2/show/NCT01301001?term=vulvodynia&rank=7>, or contact Leslie Rawlinson at [lrawlins@uthsc.edu](mailto:lrawlins@uthsc.edu) or 901-682-9222. ■

### NVA Gratefully Acknowledges TWSHF Gift

The NVA would like to acknowledge the generous transfer of assets from The Women's Sexual Health Foundation (TWSHF), an organization established in 2003 to educate the public and health care professionals about the diagnosis, treatment and research of female sexual health difficulties. Following a careful review of the resources necessary to continue operating, TWSHF's Board of Directors decided to dissolve the nonprofit and donate its assets to the NVA, because we share a

common mission to educate patients, health care professionals and the public about women's sexual health. The NVA is honored by the trust TWSHF President and Founder Lisa Martinez, RN, JD, and the Board of Directors have shown in the NVA. This generous gift will help the NVA to further our mutual goals. Ms. Martinez and the TWSHF Board of Directors have been leaders and tireless advocates for women's sexual health, and we are honored to continue their important work. ■

## Menopause

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### References

Bachmann GA, Nevadunsky NS. Diagnosis and treatment of atrophic vaginitis. *Am Fam Physician*. 2000;61:3090-6.

Castelo-Branco C, Cancelo MJ, Villero J, Nohales F, Julia MD. Management of postmenopausal vaginal atrophy and atrophic vaginitis. *Maturitas*. 2005;52 (1 suppl):S46-52.

Kelley C. Estrogen and its effect on vaginal atrophy in postmenopausal women. *Urol Nurs*. 2007;27:40-5.

Kingsberg SA, Kellogg S, Krychman M. Treating dyspareunia caused by vaginal atrophy: A review of treatment options using vaginal estrogen therapy. *Int J Women's Health*. 2009;2:1-6.

Krychman ML. Vaginal estrogens for the treatment of dyspareunia. *J Sex Med*. 2010 Nov 22.

North American Menopause Society. The role of local vaginal estrogen for treatment of vaginal atrophy in postmenopausal women: 2007 position statement of The North American Menopause Society. *Menopause*. 2007;14:357-69.

Society of Obstetricians and Gynecologists of Canada. SOGC clinical practice guidelines. The detection and management of vaginal atrophy. Number 145, May 2004. *Int J Gynaecol Obstet*. 2005;88:222-8.

Stenberg A, Heimer G, Ulmsten U, Cnattingius S. Prevalence of genitourinary and other climacteric symptoms in 61-year-old women. *Maturitas*. 1996;24:31-6.

Traish AM, Botchevar E, Kim NN. Biomechanical factors modulating female genital sexual arousal physiology. *J Sex Med*. 2010;7:2925-46. ■

## Physical Therapy

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*J Sex Med*. 6 (2009): 1955-68.

Glazer H, Jantos M, Hartmann EH, Swencionis C. Electromyographic Comparisons of the Pelvic Floor in Women with Dysesthetic Vulvodynia and Asymptomatic Women. *J Reprod Med*. 43 (1998): 959-62.

Hartmann D, Nelson CA. The Perceived Effectiveness of Physical Therapy Treatment on Women Complaining of Chronic Vulvar Pain and Diagnosed with Either Vulvar Vestibulitis Syndrome or Dysesthetic Vulvodynia. *J Sect Women's Health APTA*. 25 (2001): 13-18.

Hartmann D, Strauhal MJ, Nelson CA. Treatment of Women in the United States with Localized, Provoked Vulvodynia: Practice Survey of Women's Health Physical Therapists. *J Reprod Med*. 52, no. 1 (2007): 48-52.

Rosenbaum T. Physical Therapy Evaluation of Dyspareunia, in *Female Sexual Pain Disorders: Evaluation and Management*, ed. A. Goldstein, C.F. Pukall, and I. Goldstein (New York: Wiley-Blackwell, 2009), 27-31. ■

### Are You Moving? Do You Have a New E-mail Address?

Please help us keep our costs down by letting us know your new address or other changes in your contact information. Please contact NVA's administrator, Gigi Brecheen, at [gigi@nva.org](mailto:gigi@nva.org) or call 301-949-5114.

Thank you.