

SPECIAL ISSUE

Inhale to Breathe Away Pelvic Floor Pain and Enjoy Intercourse

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Pain during intercourse (dyspareunia) and involuntary contraction of the outer third of the vagina (vaginismus) affect between 6.5% and 45% of women. The behavioral approach often includes exhaling to the pain or anticipated discomfort. The common instruction is to exhale in anticipation or sensing discomfort, which paradoxically increases pelvic floor tension and discomfort. Thus, clinicians need to instruct patients to practice what seems initially counterintuitive. The appropriate breathing strategy is to teach effortless diaphragmatic (abdominal) breathing in which the pelvic floor relaxes and descends during inhalation and begin the insertion during inhalation. Do not press or insert during exhalation, and continue to breathe until the discomfort has faded out; then insert slightly more during the next inhalation phase. For clinicians, it is important to point out that this process is most successful when the person feels safe and is given enough time to allow the pelvic floor to relax as monitored by lower abdominal electromyography. This concept is illustrated in a case report of a young woman who successfully experienced intercourse after more than two years of marriage.

Millions of women experience involuntary contraction of the musculature of the outer third of the vagina (vaginismus) that interferes with intercourse, causing distress and interpersonal difficulty (ter Kuile, Both, & van Lankveld, 2010) or pain during intercourse (dyspareunia). It is estimated that 1% to 6% of women have vaginismus (Lewis et al., 2004), and 6.5% to 45.0% of older women and from 14% to 34% of younger women experience dyspareunia (Van Lankveld et al., 2010). The most common treatment for vaginismus is sequential dilation of the vaginal opening with progressively larger cones, psychotherapy, and medications to reduce the pain and anxiety. The dilation is effective if the pelvic floor muscles are relaxed; however, the patient may not be aware whether the muscles are relaxed or contracted. Electromyographic biofeedback monitoring can demonstrate to the patient and the practitioner when the muscles are

relaxed. In addition, patients and health care professionals may be unaware of the biological processes that influence the muscle contraction and relaxation of the pelvic floor. Success is more likely if the patient works in harmony with the biological processes while practicing self-healing and treatment protocols. The biological processes described in this article significantly affect the opening of vestibule and vagina. They are (a) feeling safe; (b) inhaling during insertion to relax the pelvic floor; (c) stretching very, very slowly to avoid triggering the stretch reflex; and (d) being sexually aroused.

Case Report: There Is Hope to Resolve Pain and Vaginismus

Yesterday, my husband and I had sex for the first time, after 2½ years of trying. Why did it take so long? Well, the doctor said “vaginismus,” the psychologist said “fear,” the physiotherapist said “constricted muscles,” and friends said “just relax, drink some wine and it will happen.”

Sex was always a weird, scary, complicated—and above all, painful—world to me. It may have started in high school: Like many other teens, I thought a lot about sex and masturbated almost every night. Masturbation was a good feeling followed by tons of bad feelings—guilt, shame, and feeling disgusting. One of the ideas I had to accept, later in my progress, is that feeling good is a good thing. It is normal, permitted, and even important and healthy.

My first experience, at age 20, was short, very painful, and without any love or even affection. He was . . . well, not for me. And I was . . . well, naïve, and with very little knowledge about my body. The experiences that came after that, with other guys, were frustrating. Neither of them knew how to handle the pain that sex caused me, and I didn’t know what to do.

The first gynecologist said that everything is fine and I just need to relax. No need to say, I left her clinic very angry and in pain. The second gynecologist was the first one to give it a name: “vaginismus.” He said that there are some solutions to the problem: anesthetic ointment, physiotherapy (“which is rarely helps,” according to his optimistic view), and if these won’t work, “We will start thinking of surgery, which is very painful and you don’t want to go there.” Oh, I certainly didn’t want to go there.

After talking to a friend whose sister had the same problem, I started seeing a great physiotherapist who was an expert in these problems. She used a vaginal biofeedback sensor that measured muscles' tonus inside the vagina. My homework was 30 constrictions every day, plus working with "dilators"—plastic cones that come in six sizes, starting from a size of a small finger to a size of a penis.

At this point, I was already in a relationship with my husband, who was understanding, calm, and—most important—very patient. To be honest, we both never thought it would take so long. Practicing was annoying and painful, and I found myself thinking a lot, "Is it worth it?" After a while, I felt that the physical practice was not enough, and I needed a psychological breakthrough. So I stopped practicing and started seeing a psychologist, for about half a year. We processed my past experiences, examined the thoughts and beliefs I had about sex, and that way we released some of the tension that was shrinking my body.

The next step was to continue practicing with the dilators, but honestly, I had no motivation. My husband and I had great sex without the actual penetration, and I didn't want the painful practice again. Fortunately, I participated in a short course given by Professor Erik Peper about biofeedback therapy. In his lecture, he described a young woman who suffered from vulvodynia, a problem that is a bit similar to vaginismus [Martinez Aranda & Peper, 2015; Peper, Martinez Aranda, & Moss, 2015]. She learned how to relax her body and deal with the pain, and finally she had sex—and even enjoyed it! I was inspired.

The key to this woman's success was to inhale diaphragmatically and at the same time feel the pelvic floor relaxing. Women can relax the muscles and open the vagina better while inhaling, instead of exhaling—as she had tried before. During exhalation, the pelvic floor tightens and goes upward, the transverse and oblique abdominal muscles slightly tighten to flatten to pull the abdomen in and upward, which pushes the diaphragm upward to cause the air the flow out during exhalation. During effortless diaphragmatic breathing, the diaphragm acts as a piston pushing upward during exhalation and going down during inhalation. During inhalation, the transverse and oblique abdominal muscles relax and so do the pelvic floor muscles. The pelvic floor descends and relaxes, especially when sitting up when you can even feel the anus slightly going down and widening (Peper Booiman, Lin, Harvey, & Mitose, 2016). This occurs during effortless abdominal breathing when one feels safe, as shown in Figure 1.

If one is fearful or anticipates pain, the abdominal and pelvic floor muscles contract to protect the body's core from harm in a defense flexor reaction. This protective pattern also tends to occur if one breathes shallowly and rapidly in the chest or gasps in fear or anticipation of pain. The rapid, shallow breathing may cause slight hyperventilation, which would increase muscle contraction excitability to stimuli (Mogyoros, Kiernan, Burke, & Bostock, 1997; Ozaki & Kurata, 2015).

This is the opposite of how patients are taught to deal with pain or how to relax. The usual training procedure instructs patients to tighten muscles and then relax while exhaling, as well as exhaling when they anticipate or feel pain. This works well for the muscles of the trunk, limbs, and face. This instruction is incorrect for the pelvic floor, because the exhalation causes the pelvic floor to tighten when a person breathes diaphragmatically or gasps.

The first step is to teach the person to relax the muscles of neck and shoulders while exhaling and then feel the pelvic floor sinking and relaxing during inhalation. After the person can sense the pelvic floor relaxation, begin the dilation practice. Once the patient understood this concept, she practiced.

I began practicing for a few minutes every day, and with every inhale, I imagined the area opening and inserted the dilator a few millimeters. I practiced in a sitting position, which I found more comfortable and less painful. I advanced to the biggest dilator within a few weeks and had a just little pain—sometimes no pain at all. The most important thing I understood was not to be afraid of the pain. The fear made me even more tense and thus exaggerated the pain. My husband and I started practicing with the real thing, very slowly and gently, trying to find the best position and angle for us. Finally, we did it. And it was a great feeling.

However, the difficulties didn't just disappear at once. We are still in progress, which contains both successful and less successful sex. The pain comes back sometimes, but it doesn't scare us—we know we can overcome it. We accept the difficulties, and we're happy with every progress. We remember to breathe and to use every inhale as a door to joy.

Biological Factors That Affect Relaxation/Contraction

Feeling Safe and Hopeful

When threatened, worried, scared, and anticipating pain, our body triggers a defense reaction. In this flexor response, labeled by Thomas Hanna as the *Red Light Reflex*, the body curls up in defense to protect itself. The shoulders round, the chest depresses, the legs press together, the pelvic floor tightens, and the head juts forward (Hanna, 2004). This is the natural response of fear, anxiety, prolonged stress, or negative depressive thinking.

Before beginning to work on vaginismus, feel safe. This means accepting that it is not your fault and that there are no demands for performance. It also means not anticipating that it will be again painful, because with each anticipation, the pelvic floor tends to tighten. For more information, read the chapter on vaginismus in Dr. Lonnie Barbach's 1983 book, *For Each Other: Sharing Sexual Intimacy*.

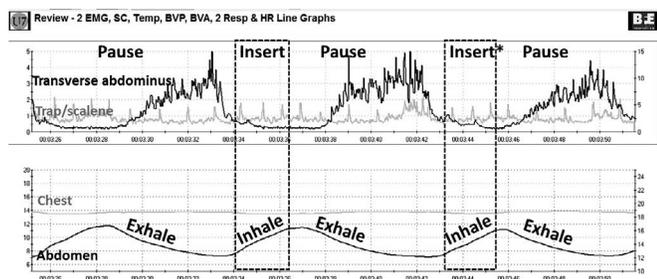


Figure 1. The relationship between abdominal diaphragmatic breathing and pelvic floor tension. *Only continue to insert-push if there is no discomfort; if discomfort occurs, keep breathing until discomfort fades out, then continue inserting/pushing during inhalation.

Inhale During Insertion to Relax the Pelvic Floor and Vaginal Opening

This instruction is seldom taught because, in most instances, we have been taught to exhale while relaxing. Exhaling while relaxing works for most muscles; however, it is different for the pelvic floor. When inhalation occurs, the pelvic floor descends and relaxes. During exhalation, the pelvic floor tightens and ascends to support breathing and push the diaphragm upward to exhale the air. Be sure to allow the abdomen to expand during inhalation without lifting the chest. Allow the abdomen to constrict during exhalation, as if inhalation fills the balloon in the abdomen and exhalation deflates the balloon. If in the sitting position, place your hands in your groin against the lower abdominal wall, and you can feel during inhalation the lower abdomen expanding and becoming softer and during exhalation slight tightening and going inward (for an exercise, see the Appendix; for detailed instructions, see Peper et al., 2016).

Do not inhale by lifting and expanding your chest, which often occurs during gasping and fear. It tends to tighten and lift the pelvic floor. Clinicians need to teach patients this diaphragmatic breathing skill, which often takes time to master. In many cases, patients continue to lift their chest and tighten their abdomen when they inhale, even though they think that they are breathing diaphragmatically. Also, tight, restrictive clothing may prevent the abdomen from expanding, just as corsets constricted abdominal breathing in women during the 19th and early 20th centuries (MacHose & Peper, 1991). Biofeedback monitoring of the breathing pattern and lower abdominal muscle activity will indicate to the patient and the clinician whether breathing is performed correctly without effort. Biofeedback makes the invisible visible and the unaware aware.

Diaphragmatic Breathing and Pelvic Floor Movement

Experience the connection between diaphragmatic breathing and pelvic floor movement in this practice:

While sitting upright, make a hissing noise as the air escapes with pressure between your lips. As you are exhaling, feel your abdomen and your anus tightening. During the inhalation, let your abdomen expand and feel how your anus descends and pelvic floor relaxes. With practice, this will become easier.

Stretch Very, Very Slowly to Avoid Triggering the Stretch Reflex

When a muscle is rapidly stretched, it triggers an automatic stretch reflex that causes the muscle to contract. This innate response occurs to avoid damaging the muscle by overstretching. The stretch reflex is also triggered by pain and puts a brake on the stretching. Always use a lubricant when practicing by yourself or with a partner. Practice inserting a very small-diameter dilator and progress to a larger diameter. These can be different diameter cones, your finger, or other objects. Remember to inhale and feel the pelvic floor descending as you insert the probe or finger. If you feel discomfort/pain, stop pushing, keep breathing, relax your shoulders, relax your hips, legs, and toes, and do not push inward and upward again until the discomfort has faded out. Give yourself plenty of time, just keep breathing, relaxing the face and shoulders, and with each inhalation feel the pelvic floor descending.

Feel Sexually Aroused by Allowing Enough Foreplay

When sexually aroused, the tissue is more lubricated and may stretch more easily. Continue to use a good lubricant.

Putting It All Together

When you feel safe, practice slow diaphragmatic breathing and be aware of the pelvic floor relaxing and descending during inhalation and contracting and going up during exhalation. When practicing stretching the opening with cones or your finger, go very, very slowly. Apply pressure of insertion only during the midphase of inhalation, then wait during exhalation and then again insert slightly more during the next inhalation. When you experience pain, relax your shoulders, keep breathing for four or five breaths till the pain subsides, then push very little during the next inhalation. Go much slower and with more tenderness.

Be patient. Explain to your partner that your body and mind need time to adjust to new feelings. However, don't stop having sex—you can have great sex without penetration. Practice both alone and with your partner; together find the best angle and rate. Use different lubricants to check out what is best for you. Any little progress is getting you closer to having enjoyable sex. In addition, watch the TED video by Emily Nagoski (2016) explaining the “dual

control model” and practice what she suggests, at <https://www.youtube.com/watch?v=HILY0wWB1BM>.

Finally, practice the exercises developed by Dr. Lonnie Barbach, who was one of the first co-directors of clinical training at the University of California San Francisco, Human Sexuality Program, and who created the women’s preorgasmic group treatment program. The exercises are superbly described in her two books, *For Each Other: Sharing Sexual Intimacy* and *For Yourself: The fulfillment of Female Sexuality*, and are a must read for anyone desiring to increase sexual fulfillment and joy (Barbach, 1983, 2000).

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