

# Treatment Protocol For Vaginismus: A Case Study

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## Introduction

There has been significant controversy over both the definition and diagnosis of vaginismus. Although the condition generally involves a muscular contraction or spasm in the vagina prohibiting any type of penetration, in some cases there is little muscular contraction and vaginal penetration is avoided primarily due to fear. Women with vaginismus often avoid gynecological exams, cannot insert a tampon, report feelings of sexual inadequacy and avoid any kind of sexual contact. This can have significant negative effects on their relationships or cause them to avoid relationships completely.

The statistics on the prevalence of vaginismus vary greatly but the most recent research shows that vaginismus is affecting a significant part of the female population. "The prevalence of vaginismus has been reported to be 6% in two widely divergent cultures, Morocco and Sweden." ( Lewis, RW, Fugl-Meyers KS, Bosch R, Fugl-Meyers, K.S., Laumann, E., Lizza, E., Martin Morales, A. 2004). Vaginismus rates of between 12% and 17% have been reported in women presenting to sexual therapy clinics. (Spector, I., Carey, M. 1990). "Community estimates put the prevalence between 0.5%, whereas rates of 4.2-42% have been reported in specialist and clinical settings." Simmons, JS Carey MP. 2001) Vaginismus affects many women and causes a great deal of suffering. Women often remain untreated for years and many physicians and therapists are unclear how to best treat vaginismus.

We report a case of primary vaginismus that benefited from the treatment protocol we will outline in this article. This case is representative of many cases we have successfully treated with this protocol. We then review the broader protocol of assessment, diagnosis, and the treatment of vaginismus with dilation, medication, psychotherapy and sex education.

## Case Summary

A 26-year-old Caucasian woman presented with the complaint of being unable to achieve vaginal penetration. In addition, she had been unable to have a gynecological pelvic exam. She was extremely fearful of the pain related to penetration. At the time of her initial appointment she had been with her partner for four years and they had been married for 1 year. She reported that her partner was supportive and he was present throughout her initial medical examination. The patient was also anorgasmic, but declined treatment for this condition.

Her medical examination revealed no physical abnormalities. She did not have an intact hymen and had no vulvar pain. The patient had previously enjoyed manual stimulation with her husband but as their relationship progressed and penetration continued to be impossible she became aversive and withdrew from any kind of sexual contact. She hyperventilated during the initial exam and was diagnosed with primary vaginismus, classified as a Lamont 4/4. The clinician reported that, "She screamed at one time during the exam; however she verbalized that she was not in pain."

We initiated our vaginismus protocol and began dilation with the smallest dilator. Because of her severe anxiety the patient was given a prescription for one mg of Ativan at her first appointment. She took it prior to the second appointment and then never needed it again. Although the patient was extremely anxious, she moved through the series of dilators in rapid progression, using each dilator for 1-2 weeks. She was then able to use a dildo. Her husband was present and part of the dilation process and expressed that throughout the process he had become more aware and sensitive to her ability to be penetrated. He felt that he gained an understanding of which angles seemed easiest for her when penetration was attempted and gained a level of

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comfort that she could be penetrated without significant pain.

A list of psychotherapists was offered but she declined. The sexuality counselor met with the patient throughout the protocol and supported the patient throughout the dilation process, assessing and assisting with her fear about penetration.

After the dildo was successfully used for one week, the clinician and sexuality counselor met with the couple to prepare them for their first attempt at intercourse. After successful use of the dildo and maintenance with dilators, the patient was able to have pain free intercourse. The entire course of treatment was five months.

The sexuality counselor followed up after one month to check on the patient's progress. The patient was having pain free intercourse 1-2 times a week with her husband.

### Defining Vaginismus

Vaginismus is currently defined in the DSM 4 (2000) as a "recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with sexual intercourse. The disturbance causes marked distress or interpersonal difficulty. The disturbance is not better accounted for by another axis 1 disorder (somatization disorder) and is not due excessively to the direct physiological effects of general medical condition. It can be 1. Lifelong/acquired or 2. Generalized/situational or 3. Due to psychological factors/combined factors" (DSM 2000). Weijmar Schultz et al. revised this definition to include "persistent difficulties to allow vaginal entry of a penis, a finger, and/or any object, despite the woman's expressed wish to do so. There can also be variable involuntary pelvic muscle contraction, (phobic) avoidance and anticipation/fear/experience of pain" . (Weijmar Shultz, W. , Basson, R., Binik, Y., Eschenbach, P., Wesselman, V., Van Lankveld, J. 2005). In the proposed revision of the DSM 5, vaginismus (not due to medical condition) will be defined as a Genito-pelvic Pain/Penetration Disorder. However, for the duration of this paper we will refer to the condition as vaginismus. Until the publication of the DSM 5 in May 2013, vaginismus is the term used in the medical and psychological communities that treat women with these symptoms. Though this condition is difficult to define, and it's etiology is largely unknown we have found the protocol explained below to be extremely effective in the treatment of vaginismus.

### Etiology

There are numerous hypotheses as to the etiology of vaginismus however; none of them has received empirical data for causation. "Therefore we do not recommend the specification of a biologic or psychological etiology." (Weijmar Schultz, Basson, Binik et al., 2005). Studies have indicated that vaginismus is a conditioned response to fear and association of sexual activity with pain, which can in turn cause a great deal of anxiety around sexual issues (Leiblum, 2000; Butcher 1999). Other studies have shown that fear of pain may also be associated with physical pain that occurs concurrently with other medical issues, such as," hymeneal abnormalities, vaginal atrophy, provoked vestibulodynia, endometriosis, infections, vaginal lesions, and sexually transmitted diseases." (Goldstein et al., 2009, p. 230). Although there have been hypotheses of a link between vaginismus and incidents of sexual abuse, there appears to be limited empirical evidence for causation. In fact, only one study has found that women with vaginismus had a higher rate of childhood sexual abuse than the general population. (Goldstein et al., 2009; DSM IV, 2000; Butcher, 1999; LoPiccolo & Stock, 1986; Shortle & Jewelewicz, 1986). Another

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component may be little or no education about sex and sexuality. (Silverstein, 1989).

### Protocol

#### Assessment

Using a team based approach; a sexuality counselor and women's health practitioner assess each patient. A psychosexual history, detailed medical history and physical exam with a focused pelvic exam are performed to determine the vaginismus diagnosis.

The psychosexual history is taken by the sexuality counselor. The psychosexual assessment is a multi sectional interview that focuses on four dimensions of sexual functioning: desire, arousal, orgasm and pain. The assessment also explores family of origin, ideas around sexuality, current relationship status, potential issues and any history of abuse or trauma. The sexuality counselor uses this interview to determine the level of anxiety and fear surrounding vaginal penetration.

After the psychosexual history the patient will meet with the clinician for a review of their medical history and the pelvic exam. The pelvic exam begins with a genital mirror assessment to familiarize the patient with her anatomy. It is then followed by a Q Tip test to see if there is pain in the area of the vestibule characteristic of vestibulodynia (may be referred as: vulvodynia or vulvar vestibulitis). A wet Q Tip is placed, with some degree of pressure on the vestibule at 2, 4, 6, 8 10 o'clock to determine if there is provoked pain. In cases in which the Q Tip test is negative, we rule out vestibulodynia.

If the patient does respond positively to the Q Tip Test, they may be suffering from vulvodynia. "There are two main types of vulvodynia: generalized ( throughout the vulvar area) or localized ( within the vulvar vestibule only). Either may be provoked ( elicited with stimuli such as touch ), spontaneous ( occurring without any pressure being applied to the area) or a mix of the two. Generalized vulvodynia is often referred to as GVD and localized is often referred to as provoked vestibulodynia or PVD." ( Goldstein, 2011) The distinction between vaginismus and vulvodynia is extremely important in terms of correct diagnosis and treatment. Vulvodynia is "a chronic painful disorder with estimated prevalence of 9-12%. Previous assumptions stating that the problem is solely a psychological disorder have been abandoned, because inflammatory mechanisms and genetic factors have been found to be involved in the pathogenesis as well as psychosocial factors." (Petersen, CD et al.2008) A further discussion of vulvodynia including various types and further specifications as to symptoms, etiology and treatment is not relevant to this specific case study. However differentiating between vaginismus and vulvodynia is necessary for proper treatment, and frequently women have both. Visual inspection of the vulva should be performed with magnification (vulvoscopy) to rule out dermatologic diseases of the vulva such as lichen sclerosis or lichens planus.

A bimanual exam is next performed and the patient is assessed for the degree of vaginismus as rated on the "Lamont Scale." Vaginismus has been classified by J. A. Lamont according to the severity of the condition. He describes four degrees of vaginismus: "In first degree vaginismus, the patient has spasm of the pelvic floor that can be relieved with reassurance. In second degree, the spasm is present but maintained throughout the pelvis even with reassurance. In third degree, the patient elevates the buttocks to avoid being examined. In fourth degree vaginismus (also known as grade 4 vaginismus), the most

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severe form of vaginismus, the patient elevates the buttocks, retreats and tightly closes the thighs to avoid examination.” ( Lamont, 1978)

Sometimes the patient will report minimal pain and instead use the word “discomfort” to describe what she is experiencing. Generally, in these cases, the fear of penetration is the most prominent feature of their diagnosis. The clinician bases her diagnosis of vaginismus on the presence of vaginal spasm or tension with an accompanied fear of penetration. Once this diagnosis has been determined, the treatment process of dilation, medication, psychotherapy and sex education can begin.

### Treatment

The patient meets weekly with a clinician for dilation and with a sexuality counselor for sex education and cognitive behavioral work. Patients may be given medication, relaxation exercises, books and/or cd's to ease anxiety during the process. Patients may also be referred to see a psychotherapist to explore deeper issues regarding body image, sexuality and anxiety. The possibility of using Botox injections is introduced to the patients in early stages as an option if they feel the dilation may become too overwhelming or unproductive.

### Dilation

Dilation is implemented with a clinician during weekly sessions. The clinician uses hard plastic dilators, which are cylinders of gradually increasing size, to slowly, and gently stretch the vaginal muscles over time. Prior to inserting the dilator, the clinician covers the dilator in a water based lubricant. Our preferred dilator set consists of seven varied sized dilators ranging from 1.3 cm. in diameter to 3.5 cm. in diameter. The clinician begins the dilation process using the smallest size dilator. The clinician inserts the dilator slowly, talking the patient through her fear and anxiety, and ideally leaves the dilator in place in the vagina for several minutes. The dilator is then removed and the patient is encouraged to repeat the process with the clinician. Once it is established that the patient can successfully insert the dilator on her own, she is asked to self dilate every night at home. The initial stages of self-dilation begin with inserting the dilator and holding the dilator in place for 8-10 minutes. After the patient is comfortable with this phase of dilation, she is instructed to move the dilator to stretch the muscles surrounding the vagina, and simulate the motion of intercourse. They are assessed at a weekly appointment and a larger size is introduced as a patient gains some degree of comfort and mastery over each size. A larger size will be introduced despite the fact that there is still some discomfort with the current size. The patients may continue to feel some element of discomfort but they generally become less anxious with insertion. Patients may also be instructed to do relaxation and breathing exercises prior to and during dilation in the office and at home if the anxiety persists.

We recommend dilators made by Syracuse Medical Device. After experimenting with many brands over the years, we find that these are easy to use, easy to clean and come in gradually increasing sizes which make the process incremental and thus easier for the patients. Once the dilator series has been completed, a dildo that is anatomically congruent to a penis is then incorporated into treatment. We generally use a dildo that is 13.25 cm. in diameter. We also have larger dildos if the patient has a partner that is larger than this size. This functions as a bridge between the dilators and something more akin to a human body. We find that the dildo must be slightly larger than the patient's partner to complete the dilation process most successfully. If the standard dildo is not large enough we introduce a larger dildo after dilation with the smaller one.

If the individual is in a relationship, the partner is encouraged to become involved in the dilation

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process by helping the patient with insertion. Once the patient can successfully insert the dildo the patient and the partner meet with the clinician and sexuality counselor to prepare emotionally and physically for the transition to intercourse.

### Medication

Our treatment protocol may also include medications. Typically if the patient is suffering from acute anxiety around the dilation appointments we suggest using a short acting benzodiazepine one hour prior to the dilation. This medication frequently helps the patient manage their anxiety at the beginning of treatment and then becomes unnecessary after the first few visits.

If the patient has more chronic anxiety we often suggest a Serotonin Norepinephrine Reuptake Inhibitor (SNRIs). We use Cymbalta over Effexor or Pristiq because it seems to have fewer negative sexual side effects. Practitioners should be cautious with the use of Selective Serotonin Reuptake Inhibitors (SSRIs) or SNRIs because they can cause other types of sexual dysfunction including Hypoactive Sexual Desire Disorder (HSDD) Hypoactive Sexual Arousal Disorder (HSAD), and orgasmic dysfunction. Use of the SSRI's should be limited, if possible, to the term of treatment. The clinician may also recommend lidocaine 5% ointment. We find that applying lidocaine 5% ointment 10 minutes prior to dilation can help lessen discomfort.

### Psychotherapy

We often suggest psychotherapy if the patient is struggling with the dilation process and is slow to make significant progress with treatment. Therapy may include: exploring the patient's fear and relevant cognitions, exploring issues around one's body and one's sexuality. It may also include setting limits with others and exploring what does and does not feel comfortable in terms of her own relationship with her body and how she feels about being touched by others. When a patient proceeds with the dilation and psychotherapy simultaneously they may progress more quickly because they are both addressing the physical manifestation of the vaginismus as well as their issues regarding intimacy and sexuality.

### Sexuality Counseling

The patient will also work with a sexuality counselor on psycho education: learning about her anatomy, masturbation and addressing any sexual misconceptions she may have. At regular intervals during the dilation process, the counselor will meet with the patient and will help her assess her anxiety before, during and after the dilation using a 0-10 Likert scale. This helps the patient evaluate her own anxiety and to see the fluctuation in her anxiety throughout the experience and over time.

We also encourage women to continue to engage in non-intercourse sex throughout the dilation process. This can help maintain her sexual connection to herself and her partner through this somewhat sterile and difficult process. Women often feel the dilation process is arduous and keeping a healthy sex life throughout can help the individual remain motivated.

Once the patient is able to insert the largest dilator and dildo, we set up a meeting with the patient to prepare the patient and her partner for their first attempts at intercourse. We discuss the fact that the first time may be awkward and that they may have to work through their discomfort and lack of romance until they become comfortable. We find this helps to lower expectations for the

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first experience and set the couple up for success rather than failure.

We also review with them the concerns that the partner may have at this juncture. We have found that many partners of vaginismus patients develop secondary and temporary impotence. This seems a natural response to their fear of inflicting pain on their partner and their need to progress slowly initially with intercourse. If the partner is concerned or begins to exhibit problems, we encourage them to see their primary care practitioner to get a prescription for a phosphodiesterase type 5 inhibitor for the first few attempts at intercourse.

### Alternative Treatments

In cases where dilation does not progress there are several alternative treatments that might be considered. If a woman has what is considered “high pelvic tone” genital pelvic physical therapy can be helpful. In this modality of treatment, a woman meets with a physical therapist 2 times a week for 10 to 20 weeks. The therapist would then perform pelvic massage with internal and external manual manipulation.

Another recent but extremely effective treatment is the injection of botox into the vagina. This treatment is used when the patient is not progressing or if they continue to feel tight and find penetration to be difficult despite progression with dilation. Although there are different techniques used to inject Botox, our process involves putting the patient under conscious sedation. Botox is then injected into the vaginal muscles. A local anesthetic is administered under sedation to prevent any pain upon waking and then a large dilator is inserted into the patient’s vagina. The patient wakes up with the largest dilator inside them. For many patients this is a revelatory moment as they have often not believed they could have penetration of any sort. After the injection the patient will need to dilate, but the Botox will act as the initial impetus to help jump-start the process.

### Discussion and Conclusion

In an attempt to understand and properly treat vaginismus, we as clinicians, must clarify which aspect of the condition actually interferes most significantly with penetration. Is the patient’s fear associated with direct, severe and continued pain from the spasm of the muscle or is the fear independent of, and more severe than, the pain itself? Is the patient suffering from vaginismus or vestibulodynia or a combination of both? With proper assessment and diagnosis and by clarifying which components are most significant a clinician can tailor the treatment appropriately for the patient. A multifaceted approach is the most successful in treating this condition. Treatment protocols including a combination of dilation, medication, psychotherapy and sex education provide the most effective treatment for vaginismus.

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