

Dyspareunia: eliciting the source of the pain

Gisèle Bourgeois-Law, MD, FRCSC

ABSTRACT It is often beneficial for both patient and physician to approach dyspareunia as a pain condition rather than a sexual or psychological problem. As in other pain disorders, the questions asked in the history will aim to elicit the nature of the pain, its onset and duration, aggravating and alleviating factors, and the associated symptoms. Many women hesitate to ask their physician about dyspareunia: by the time the problem is finally discussed, it has taken on a life of its own, with several psychological ramifications. Dr Bourgeois-Law outlines the many causes of this condition and shows how a carefully taken history will often suggest the cause. The physical exam is then used to confirm rather than elicit the diagnosis.

It has been suggested that 18% to 20% of adult women have ongoing dyspareunia,¹ and that this figure may be as high as 58% at 3 months postpartum.² It is likely that almost every woman experiences some degree of dyspareunia at some time in her life. However, many women with dyspareunia are too embarrassed to mention it to their physician at its onset. By the time most women seek professional attention, the condition has assumed a major role in their lives. The effects of dyspareunia are far-reaching. Aside from the physical symptoms, dyspareunia leads to difficulties within relationships, feelings of low self-worth, and questions as to one's femininity.

Even more problems can arise when dyspareunia is left untreated; it can lead to further sexual problems and to one or more "vicious circles." For example, the pain of dyspareunia can lead to low libido, which can be directly responsible for lack of arousal. When there is a lack of arousal, most women experience less vaginal lubrication, and insufficient lubrication is a common cause of dyspareunia. Another common scenario involves a partner who, not wanting to subject the woman he loves to pain, learns to "finish as quickly as possible." By the time the woman's dyspareunia is resolved, the partner is unable to break this pattern of premature ejaculation, which, if unresolved, leads to frustration and perhaps low arousal in the woman, potentially leading to a recurrence of dyspareunia because of lack of lubrication.

A pain syndrome

Dyspareunia is often viewed as a sexual problem, but in reality the patient is better served by viewing it as a pain problem with the sexual concerns being a side effect of the pain.³ Similarly, attempting to classify dyspareunia as psychological or biological does not help the individual patient. Dyspareunia, like any other pain syndrome, invariably develops a psychological overlay re-

Practice Tips

‡ *Emphasize that this is just one type of a chronic pain condition and avoid suggesting that the pain is psychological. Explain that any chronic pain affects our psychological makeup over time.*

‡ *Explain to the patient that your line of questioning is necessary to find the cause of the pain and does not suggest that you think the pain is "all in her head."*

‡ *Remember that vaginismus is a symptom of dyspareunia, not a diagnosis—you must always ascertain the underlying cause.*

‡ *Ask about a history of chronic pain, including a history of fibromyalgia, low back pain, or injury.*

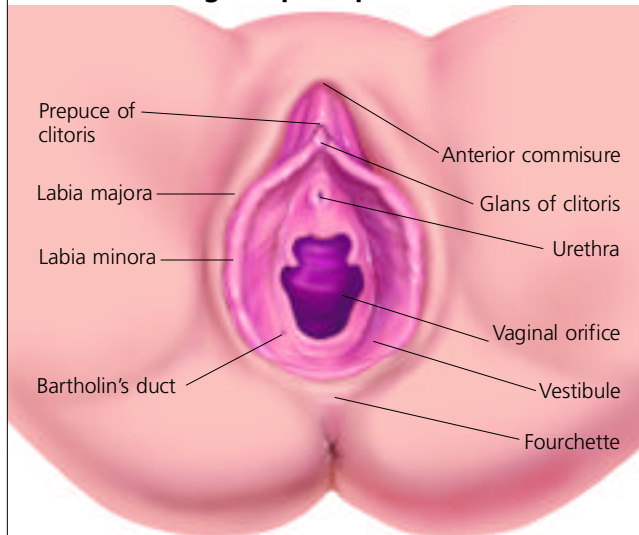
Gisèle Bourgeois-Law, MD, FRCSC

Medical Director
Pelvic Pain Clinic
St. Boniface Hospital
Winnipeg, Manitoba
Canada

TABLE 1 Taking the history of dyspareunia

- Ask the patient to describe the pain in her own words
- Inquire about exact location of the pain
- Verify characteristics of the pain: onset, course, and duration of each episode
- Inquire about aggravating and alleviating factors
- History of the pain over time
- Ask about similar pain at other times (eg, with tampons, pelvic exams, tight clothing rubbing against vulva)
- Look for associated symptoms (eg, vaginismus)
- Ascertain hormonal status (ie, pre-, peri-, post-menopausal)
- Take a general medical history and review of symptoms
- Review past investigations and treatment; has the patient been able to be examined?
- Effect of the pain on patient's life and relationships?
- Ask for patient's view as to what is causing the pain

FIGURE Locating the pain: parous introitus view



Some women have difficulty distinguishing between vulvar, introital, and mid-vaginal pain. Ask the patient if she can pinpoint the pain to a particular spot.

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gardless of the precipitating cause. Psychological sequelae include lack of arousal, fear and expectation of pain, altered ways of relating to the partner, and lowered sexual self-esteem. Most women with longstanding dyspareunia benefit from concomitant sex therapy.⁴

If we think of dyspareunia as a pain problem, then the elements of the sexual history are similar to those of any patient with pain. These include obtaining an accurate description of the pain, its onset, course and duration, aggravating and alleviating factors, a general medical history, and review of symptoms and their effects on the patient's life (Table 1). The diagnosis of dyspareunia can often be made with a careful history. The physical examination, although always necessary, merely corroborates one's suspected diagnosis.

Description of the pain

Where? The first step is to determine the exact location of the pain. A diagram or plastic model (Figure) may help some women who have difficulty distinguishing between vulvar, introital, and mid-vaginal pain. Ask the patient if she can pinpoint the pain to a particular spot—some women with scars from previous injury or episiotomy, or those who have a neuroma, have pain at only one particular point.

Also ask her to describe the pain. Women with vaginismus often describe the pain as burning or “like it's too tight in there.” However, many women have inaccurate

pain location and classically the pain experienced from touching the sites of allodynia around the introital edge in the condition of vulvar vestibulitis may be described as “about an inch inside my vagina.”

When? When the pain occurs can also offer clues to the diagnosis (Table 2). Pain upon sexual arousal—before any physical touch—may be associated with vulvar or pelvic varices.⁵ Increased pelvic congestion associated with arousal leads to dilation of pelvic varicosities. The knee-chest position leads to emptying of the varicosities, as blood flows toward the heart. In this case, ask the patient to assume the knee-chest position for a few minutes. Therefore, pain that is caused by varices will be alleviated by this position.⁵ Pain that occurs upon penetration may be the result of vulvar conditions, such as vulvar vestibulitis, recurrent tearing of the posterior fourchette, vaginal infections, or vaginismus. The partners of women with vaginismus sometimes say they feel as though they are “hitting a wall.” If the pain is mid-vaginal and occurs after a few minutes of thrusting, the problem may be that the woman loses focus, starts thinking of something else, and her diminished arousal leads to lack of lubrication.

Deep pain that occurs with thrusting may be caused by pelvic pathology, by pelvic muscle hypertonicity, or because the partner is hitting the cervix in certain positions. Pain that starts after ejaculation and is accompanied by severe burning may occasionally be symptomatic of a semen allergy, but can be a presentation of vulvar vestibulitis.⁶

TABLE 2 Possible causes of dyspareunia, by onset and location of the pain

At arousal, before any physical contact

- Pelvic varices or vulvar varices
- Pelvic congestion from any cause

Introital (as soon as penetration is attempted)

Vulvar

- Vulvodynia (dysesthetic vulvodynia, vulvar vestibulitis)
- Chronic vulvar skin conditions (eg, eczema, psoriasis, lichen sclerosis)
- Imperforate or rigid hymen
- Vulvar infections (eg, yeast, condylomata, herpes)
- Scarring from previous injury (trauma, episiotomy)

Vaginal

- Vaginismus
- Infection (eg, candidal vulvovaginitis)
- Postmenopausal vulvovaginal atrophy
- Congenital anomalies of the genital tract
- Sjögren's syndrome¹

Mid-vaginal

- Vaginismus from various causes
- Bladder, for example, interstitial cystitis, urethritis, urethral polyps
- Hypertonicity of pelvic muscles with localized muscle tenderness
- Bowel: constipation, proctitis
- Patient loses focus in the middle of intercourse and lubrication ceases as she is no longer aroused

Deep dyspareunia

- Pelvic adhesions
- Ovarian cysts or other pelvic masses
- Endometriosis
- Chronic pelvic inflammatory disease
- Anything that causes tethering or fixation of the peritoneum
- Sequelae of hysterectomy: granulation tissue, fallopian tube prolapse²
- Bowel (inflammatory bowel disease)

Dyspareunia that starts after male ejaculation

- Vulvar vestibulitis (can also occur on entry)
- Semen allergy

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Onset, course, and duration

It is important to ascertain when the pain started, how it has evolved over time, and even how it evolves in any particular episode. Although there is no standard definition of the length of time after which dyspareunia is classified as chronic rather than acute, apart from cases of vulval-vaginal infection, where dyspareunia is not the most pressing symptom, most cases are considered chronic.

Introital pain that has been present since coitarche is usually vaginismus, with or without vulvar vestibulitis. Remember that vaginismus is a symptom, not a diagnosis—you must always ascertain the underlying cause. The underlying cause of vaginismus may be hormone-related atrophy, which causes pain, leading to vaginismus; another cause is simply the patient's fear that insertion of a foreign object into the vagina would hurt, making the woman become so tense that penetration does hurt, leading to subsequent vaginismus.

Although the underlying cause of vaginismus may be long-resolved, leaving only the residual reflex muscle spasm, this is not always the case. A study of women with primary dyspareunia (caused by vaginismus) found

that a large percentage of these women had vulvar vestibulitis.⁷ Primary dyspareunia is pain that began when the patient first became sexually active—there has never been a time when intercourse was not painful. Secondary dyspareunia is one that begins after a period of pain-free intercourse. Women with milder degrees of vaginismus sometimes note that the pain lessens or may even cease entirely as intercourse progresses and the over-contraction of the perivaginal muscles lessens.

Dyspareunia that starts postpartum is often secondary to vaginismus, but may also be secondary to episiotomy complications, or to lack of arousal from various causes. My clinical experience suggests that postpartum primary dyspareunia caused by vaginismus can be so severe as to make intercourse impossible. Introital pain that starts with a yeast infection and occurs only with intercourse also suggests vaginismus.

Other questions to ask regarding the course include whether the pain disappears with withdrawal—typical of the muscle tightness of vaginismus—or whether it continues for a few hours or even into the next day, and if there are times when the pain lessens or is absent. If the

latter is the case, then discussing with your patient what is different about the pain at those times can be helpful in making a diagnosis.

Aggravating and alleviating factors

As with any pain, women with dyspareunia should be asked “What makes the pain better?” and “What makes it worse?” Specific questions should be asked about the relationship of the pain to her menstrual cycle and to coital position. A relationship to the menstrual cycle suggests the possibility of endometriosis. A relationship to position suggests, depending on the particular position, the possibility of endometriosis or other pelvic pathology, interstitial cystitis, proctitis, chronic constipation, or the partner hitting the cervix—which is very pleasurable for some women, but uncomfortable for others.

Ask the patient if she has similar pain at other times, and if so, what seems to precipitate it. Associated difficulties with tampon insertion and pelvic exams suggest vaginismus, which may result from many underlying causes, including vestibulitis. Vulvar burning that is intermittent and worsens with intercourse, tight clothing, or any form of touch suggests vestibulitis, but constant burning is characteristic of dysesthetic vulvodynia. Chronic pelvic pain associated with deep dyspareunia suggests endometriosis or other intrapelvic pathology.

General medical history

Be sure to take a general medical history, with emphasis on chronic medical problems, such as diabetes, hypertension, and any use of prescribed and over-the-counter medications and herbal supplements, such as St. John’s wort. Also rule out decrease or lack of arousal secondary to medication side effects as a cause of dyspareunia. Evaluate the patient’s hormonal status: Is she peri- or postmenopausal? Does she take oral contraceptives or hormone replacement therapy? Ask about a history of chronic pain, including a history of fibromyalgia, low back pain, or injury. The latter may contribute to vaginismus, which may respond to pelvic floor physiotherapy.⁸ You must inquire about previous diagnoses, tests, and treatments. Remember that some women with dyspareunia have never been able to be examined, and some dyspareunia is so severe that intercourse has never actually occurred. Has the patient seen one or more specialists, or sought the services of an alternative medicine practitioner? What treatment was tried and to what degree of success?

Review of systems

In the review of systems include questions on vaginal discharge, vulvar burning or pruritus, urinary tract symptoms, bowel function, and menstrual cycle changes. Remember to ask about a history of sexual trauma; this includes not only obvious questions regarding molestation or rape but also questions about medical procedures as a child. Childhood urethral instrumentation or vaginal examination may be a contributing factor in vaginismus. Understanding any underlying reasons for her difficulties is very reassuring to a woman who thinks there must be something seriously wrong with her emotionally because sex has always been painful for her.

How is the pain affecting her life?

Because this condition has serious implications to her relationship with her partner, it is helpful to know how the patient’s condition has affected other aspects of her life. How has the pain affected her sex life and her relationship? Is intercourse even possible? Has it ever been possible?⁹ Has this affected her libido? Have she and her partner switched to noncoital modes of sexual expression or have they simply decreased or stopped physical intimacy? Does she avoid even cuddling and kissing because that might lead to intercourse? Do she and her partner talk about it? If so, what usually happens when they do? Do one or both of them express anger, frustration, discouragement? Does it end in tears? The answers to these questions will give you a better idea of how severely this situation may be affecting both partners.

Patient input. As with other medical conditions where the diagnosis is not immediately apparent, it is often helpful to ask the patient what she and her partner think might be going on. Valuable information that did not come out in the history may occasionally be gained this way. It is important to know how dyspareunia affects the patient’s life and relationships and to involve the partner, if at all feasible, particularly if no cause has yet been found. It is common for the partner to blame himself or herself for the problem or, conversely, to think it must be in the patient’s head if physicians have not been able to immediately find the cause.

As physicians we sometimes need to be reminded that there are a lot of things we do not know, and to avoid labeling the problem as “psychogenic” if physical examination is negative. In such a case, it may be helpful to explain to the patient that just as one can have a headache without a brain tumor yet the pain is real and requires treatment, so can she have dyspareunia with-

Physical examination of the patient with dyspareunia

There is a saying in medicine that if you listen to the patient long enough he or she will give you the diagnosis. The importance of a thorough and focused history in diagnosing the cause of dyspareunia cannot be overemphasized. The physical examination is often merely confirmatory. Sometimes part or all of the diagnosis can be made before even laying hands on the patient, as when the patient with severe vaginismus is so nervous that she has recoiled up the examining table before the exam has even begun.

Remember, though, that other causes of dyspareunia may coexist with vaginismus. It is important in all women, but particularly in women with dyspareunia, to proceed slowly with the examination and to explain what one is about to do. Unless the pain is purely introital, an abdominal exam looking for tenderness and masses should be part of the physical exam.

Components of the physical exam

Abdominal exam

Unless dyspareunia is introital only

Vulvar exam

- ▮ Erythema
- ▮ Leukoplakia
- ▮ Fissures
- ▮ Excoriations
- ▮ Lesions
- ▮ Q-tip test

Using the speculum

- ▮ Does the speculum meet resistance after 2–3 cm?
- ▮ When the patient pushes out as the speculum is inserted, does it affect the pain?
- ▮ Discharge; swab for common pathogens if not done since onset of problem
- ▮ Lesions

Bimanual exam, including rectovaginal exam

- ▮ Check areas of point tenderness (eg, just inside hymeneal ring, anterior vaginal wall)
- ▮ Palpate levator muscle spasm
- ▮ Assess ability of pelvic floor muscles to contract/relax
- ▮ Check cervical motion tenderness
- ▮ Look for presence of pelvic masses
- ▮ Investigate fixed, retroverted uterus (endometriosis, adhesions), or tender boggy uterus (adenomyosis)
- ▮ Uterosacral nodularity (endometriosis)

Vulvar exam

The vulvar exam starts with inspection. Having the woman spread the labia with her fingers may help her feel some control and often allows more complete visualization for you during the exam. Check if there is any discharge at the introitus. Any edema, erythema, or leukoplakia? Does the patient have rashes or lesions? Any cracks or fissures? Evidence of old injury, such as episiotomy scars? Remember that vulvar skin can be prone to generalized skin conditions such as eczema or psoriasis. Lichen sclerosis, although more common in prepubertal girls or postmenopausal women, occasionally occurs in women of reproductive age. Any suspicious lesions should be biopsied.

A Q-tip test should always be performed for dyspareunia: the vulvar vestibule is lightly touched with a Q-tip. Women with vulvar vestibulitis will experience this as painful, occasionally even excruciating;¹⁰⁻¹² this phenomenon is known as allodynia.

Vaginal exam with speculum

If you suspect that vaginismus is the cause of your patient's dyspareunia, instruct her to bear down or to push out as though she were having a bowel movement while you insert the speculum. Women with mild to moderate vaginismus are often pleasantly surprised at how much this simple maneuver diminishes the pain of the speculum exam. Explain how it is impossible to tighten pelvic floor muscles and “push out” at the same time and suggest that she try this with intercourse. In cases where vaginismus has not been severe enough to preclude intercourse, this reverse Kegel exercise is not only diagnostic but may be all the treatment needed.

In patients with vaginismus, you can also often feel the tight pelvic floor muscles blocking further progress once the speculum is inserted a few centimeters. Once the speculum is inserted, inspect the vagina and cervix for lesions and any discharge, and take the necessary swabs. After the speculum is removed, palpate the vagina using one or two fingers. If you discover tenderness localized to the anterior vaginal wall, it may be associated with interstitial cystitis or other bladder or urethral pathology. Specific areas of point tenderness near the introitus may be due to scarring or to a neuroma. Women with vaginismus often have a characteristic tight, tender “ring” at the level of the levator muscles.

Bimanual and rectovaginal exam

During this exam look for findings such as cervical motion tenderness, which suggests pelvic pathology associated with tethering of the peritoneum, such as endometriosis or adhesions, a fixed, retroverted uterus or endometriosis, pelvic masses such as ovarian cysts, or hard stool in the rectum signaling chronic constipation.

out a diagnosed cause, and this does not make the pain any less real or less worthy of attention.

Associated concerns. If your patient has associated sexual concerns, such as low libido, it is extremely important to ascertain which problem came first. Does she have low sexual desire because of the pain, or does she have pain because she is not interested in sex and therefore is not lubricating? You can ask the same question in relation to anorgasmia: does she not have orgasms because it hurts too much for her to “get into it,” or did her frustration over the anorgasmia lead to decreased desire and lack of lubrication?

Psychological factors. One study of psychosocial correlates of pain has shown that women who attribute their sexual pain to psychosocial causes have higher pain scores, higher levels of psychological distress, lower levels of marital adjustment, more problems with sexual function, and more frequent reports of sexual assault.¹³ This same study suggested the possibility that physician attributions can also affect patient adaptation to the pain, either positively or negatively.

Dyspareunia is a common problem. Like any other chronic pain condition, it often develops a psychological overlay over time, even if the original cause was predominantly or entirely physiological. It is important not to take this secondary effect as evidence that psychological factors are the main etiological factors. In fact, one sample of 112 women with dyspareunia who were recruited through newspaper articles on the subject did not differ from standard norms on psychopathology, marital adjustment, attitudes toward sexuality, and self-identification as having been sexually abused.⁴

Conclusion

Physicians often feel that dealing with dyspareunia is complex, time consuming, and frustrating. However, there can be immense professional satisfaction in taking the time to make an accurate diagnosis in this problem. Receiving a birth announcement from a patient with a previously unconsummated marriage is an indescribable experience. Knowing that you have made a significant impact on several aspects of someone's life compensates for some of the frustration of dealing with this condition. Not all causes of dyspareunia can be cured, but it is the rare case where some degree of relief or help in coping with the situation cannot be offered. The old adage “to cure sometimes, to comfort always” applies to dyspareunia as much as it does to other painful or chronic conditions. ♀

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