Dyspareunia

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Outline

Introduction: Dyspareunia is a common and often overlooked condition affecting women of all stages within their sexual experiences. Dyspareunia can be a condition itself, can be related to another sexual condition, or be a symptom from another pathological source. Risk factors for the condition are associated with age, education level, and economic status.

Signs and Symptoms: The most common symptom is pain that may or may not be elicited in different areas of the vagina and pelvic area. Physical signs consist of visible changes to the vaginal cavity and pH fluctuations.

Diagnosis: Diagnosis of the condition is confirmed with a thorough health history, including past medical and surgical conditions, an abdominal and pelvic exam, or imaging and laboratory testing.

Treatment Options: Treatment options for the condition are related to the underlying cause of the pain. There are nonpharmacological, pharmacological, complementary, and surgical options for treating the conditions. The most common underlying causes to treat include vaginismus, vulvodynia, postpartum pain, chronic pelvic pain, menopausal pain, and vaginal atrophy.

Concerns: Dyspareunia has a negative effect on body image, genital self-image, mental, emotional, and physical health. The condition can lead to difficulties in relationships and fertility. Due to the vast causes of dyspareunia, women can experience dismissal and uncertainty from medical professions.

Dyspareunia

Recurring or persistent sexual pain in women, termed dyspareunia, is a commonly occurring problem with a prevalence of 10% to 20% of U.S. women, although this number is under-representative as many women do not seek medical intervention (Revicky, Mukhopadhyay, & Morris, 2016; Seehusen, Baird, & Bode, 2014). Dyspareunia is classified as entry or deep pain, and primary or secondary, and causation varies by age group (Cassis, Mukhopadhyay, & Morris, 2018; Revicky et al., 2016; Seehusen et al., 2014). This occurs among both heterosexual and homosexual relationships (Cassis et al., 2018; Revicky et al., 2016). Dyspareunia can be a condition in and of itself, be associated with other sexual dysfunction disorders, or be a symptom of another problem, physical or psychologic (see Appendix A) (Cassis et al., 2018; Seehusen et al., 2014). Risk factors include young age, low education (below collegiate), urinary tract problems, poor overall health, emotional stressors, and low socioeconomic status (Seehusen et al., 2014). Postpartum dyspareunia is underreported; between 41% and 80% of women experience some sexual morbidity following the trauma of birth (Revicky et al., 2016; Seehusen et al., 2014).

Signs and Symptoms

Dyspareunia can present with pain of various natures. Vulvodynia, or vulvar discomfort which is often of a burning nature, and is diagnosed absent other findings (Revicky et al., 2016; Seehusen et al., 2014). Vulvodynia is unprovoked and is considered a neurologic dyspareunic disorder triggered by touch; it is further classified as organic or idiopathic (Revicky et al., 2016; Seehusen et al., 2014). The reported or elicited pain may be localized externally, found localized or diffuse internally, or may be along a specific segment of the vagina (deep or outer third); additionally, duration may be chronic or acute, and present with stimulation alone or be present

always (Revicky et al., 2016; Schuiling & Likis, 2017). A physical examination may reveal pale, dry, thin vaginal rugae, absent rugae, low elasticity, atrophied genital tissue, urticaria, erythema, angioedema, unusual odor or color of discharge, cervical changes or abnormalities, or a narrowed introitus, leading to diagnosis of the cause of the dyspareunia (Schuiling & Likis, 2017). With testing, atypically high pH or the presence of pathologic organisms may be noted (Revicky et al., 2016; Schuiling & Likis, 2017). Up to 50% of postmenopausal women experience vaginal atrophy related to decreased estrogen (Seehusen et al., 2014).

Diagnosis

Diagnosis and evaluation begin with a thorough history that may stem from an accompanying extra-genital symptom and should include onset, duration, quality, severity of pain, temporal factors, alleviating or worsening elements, and a comprehensive sexual history; readiness to discuss this should be assessed prior to the conversation due to its distressing nature (Cassis et al., 2018; Revicky et al., 2016; Schuiling & Likis, 2017; Seehusen et al., 2014). Timing in relation to the menses is relevant and may indicate suspected endometriosis or problems affecting fertility (Cassis et al., 2018; Schuiling & Likis, 2017). Postmenopausal women have symptoms related to changing ratios and levels of hormone (Seeuhusen et al., 2014). Other medical problems, prescription medications, or mis-use of drugs should be evaluated for etiology (Cassis et al., 2018). The patient should be asked if penile penetration, or other direct contact of internal or external stimulation causes the pain or if pain is independent of contact (Schuiling & Likis, 2017). Pain at the introitus or upon penetration by any object should be evaluated for provoked vulvodynia/vestibulitis, sexual trauma, or childbirth-related injury (Schuiling & Likis, 2017; Seehusen et al., 2014). Reports of chronic vulva pain may be related to musculoskeletal problems, other chronic pain conditions, or depression and anxiety (Schuiling

& Likis, 2017). According to Seehusen et al. (2014), depending on the location of the pain, various causalities can be pinpointed; pain in the outer third of the vagina may result from trauma. A surgical history should be elicited, including episiotomy tears and lacerations, Caesarean-section, or female genital mutilation (Revicky et al., 2016; Schuiling & Likis, 2017; Seehusen et al., 2014). Reported deep pain or pelvic pain with thrusting may be from adenomyosis, endometriosis, pelvic adhesions, chronic pelvic inflammatory disease, adnexal disorders, pelvic tumors, or bowel and bladder etiologies (Revicky et al., 2016; Schuiling & Likis, 2017). Arousal difficulties and lack of lubrication can be causative or result from other medical disorders which contribute to the pain (Seehusen et al., 2014). External causes for rule-out include vaginal infections such as candidiasis, bacterial vaginosis, or various sexually-transmitted infections (STIs), skin disorders such as lichen planus, lichen sclerosus, and lichen simplex chronicus, trauma, allergies to contraceptive methods or rarely, semen, vulvodynia, and atrophic vaginitis (Schuiling & Likis, 2017; Seehusen et al., 2014).

An abdominal exam may reveal evidence of a prior surgery, but the clinician should inquire prior to palpation to avoid causing unnecessary pain over tender quadrants (Revicky et al., 2016). Positional pain may be discovered with a pelvic exam in addition to the history, although sometimes the pelvic exam is deferred to establish rapport (Revicky et al., 2016; Seehusen et al., 2014). When performed, a tactful and gentle touch, a small speculum, and a well-lubricated single-finger manual examination is preferable (Cassis et al., 2018; Revicky et al., 2016; Seehusen et al., 2014). Vaginismus or involuntary pelvic floor muscle contractions may be palpated (Seehusen et al., 2014). The patient should be informed of probable discomfort and permitted to stop the examination at any time by request or to insert the speculum

themselves if desired (Cassis et al., 2018). As with any gynecologic exam, a chaperone should be present (Cassis et al., 2018).

Some of these conditions require biopsies or swabbed discharge samples (Cassis et al., 2018; Revicky et al., 2016). Other tools which may be used include pelvic ultrasound and diagnostic laparoscopy, although the costs, morbidity risks, and benefits should be carefully weighed (Cassis et al., 2018; Revicky et al., 2016). Use caution to not repeat testing already performed by other providers (Cassis et al., 2018; Revicky et al., 2016). Transvaginal ultrasound may be useful to identify endometriosis, with MRI to diagnose a deep infiltrating endometriosis and possible contrast enema to detect colonic invasion (Cassis et al., 2018). Vulvoscopy can be used to detect color changes of the vulva (Cassis et al., 2018). Cystoscopy or bladder biopsies are used when the urethra or bladder has suspected involvement, and electromyelograms are used to assess tone and strength of pelvic floor muscles (Cassis et al., 2018). Serum tests are performed with suspected hormonal abnormalities and include estradiol, testosterone, sex hormone binding globulin (SHBG), follicle stimulating hormone (FSH), and prolactin (Cassis et al., 2018).

Treatment Options

The most important treatment consideration of dyspareunia is to address the underlying cause of the pain (see Figure 1). All of the treatment options for the condition should be presented to the patient by discussing potential risks and benefits and allowing the patient to decide their personal course of action (Cassis et al., 2018). Treatment options will vary depending on the cause of the pain, but typically include options and methods which are pharmacologic, nonpharmacologic, complementary, or alternative, and in severe cases, surgery (Schuiling & Likis, 2017). Nonpharmacological and complementary therapies use education and

counseling to teach the woman to allow adequate time for arousal and lubrication, to modify sexual positions, to address psychosexual factors, try physical therapy, and to make behavior modifications (Revicky et al., 2016). There is limited data available on the efficacy of pharmacologic interventions to treat dyspareunia, but some of the medications used in treatment include vaginal lubricant, topical estrogen, local anesthetics, tricyclic antidepressants, Botox, oral contraception, doxycycline, and diazepam vaginal suppositories (Revicky et al., 2016; Schuiling & Likis, 2017; Seehusen et al., 2014).

Condition-specific treatments will lead to better outcomes and patient satisfaction. The treatment for vaginismus includes pelvic floor physical therapy, behavior modification, and vaginal dilation using vaginal trainers (Revicky et al., 2016; Seehusen et al., 2014). Recent studies found promising data supporting the use of Botox to treat vaginismus, although this is beyond the scope of primary care (Revicky et al., 2016; Seehusen et al., 2014). Treatment for vulvodynia begins with conservative options such as hygienic and dietary measures/education, then extends to surface electromyography, underlying psychiatric care, and medicines (Revicky et al., 2016; Seehusen et al., 2014). If these interventions fail or refractory pain persists, surgery is an option (Revicky et al., 2016; Seehusen et al., 2014). Medications used for vulvodynia include tricyclic antidepressants (most commonly amitriptyline) and local anesthetics such as topical lidocaine (Revicky et al., 2016; Seehusen et al., 2014). Female sexual arousal disorder and chronic vaginal dryness are treated with vaginal lubricants (Seehusen et al., 2014). Postpartum dyspareunia may stem from psychosexual contexts that should be treated by addressing the underlying cause, but vaginal lubricant will aid the woman during this time (Seehusen et al., 2014). Vaginal atrophy is treated with local or systemic estrogen replacement products (Seehusen et al., 2014). Treating chronic pelvic pain is difficult and may require rule-

out therapies. Therapies include assessing for underlying disease, and/or treating pelvic inflammatory disease, irritable bowel syndromes, endometriosis, and rarely, performing diagnostic laparoscopy (Revicky et al., 2016). A thorough consult with the patient on the many treatment options will make the patient feel more in control of their care and condition management (Cassis et al., 2018; Revicky et al., 2016).

Concerns

Sexuality is a natural practice that every woman has a right to experience (Schuiling & Likis, 2017). Dyspareunia is a condition that may lead to adverse psychologic and social effects including feelings of shame and embarrassment, poor body image, negative impact on mental, emotional, and physical relationships, and fertility issues. Pazmany, Bergeron, Van Oudenhove, Verhaeghe, and Enzlin (2013) found that women with dyspareunia experienced significantly more distress about their body image and reported significantly higher levels of negative genital self-image which led to further impaired sexual function. Dyspareunia can stem from a psychological source, triggered by a history of sexual abuse, poor sexual education, chronic emotional distress, domestic violence, cultural issues, or work issues (Cassis et al., 2018; Revicky et al., 2016). Women with dyspareunia can experience erotophobia with sexual encounters, which are feelings of guilt and fear related to sex (Cassis et al., 2018). Along with the mental and emotional impacts, dyspareunia causes negative effects to physical health, relationships, and fertility (Seehusen et al., 2014). The myriad of causes of the condition may lead to the inability of providers to identify the root of the problem. Women struggle with feeling invalidated by the medical profession when their pain or discomforts are dismissed as invalid complaints when a medical explanation cannot be found (Braksmajer, 2018). Braksmajer (2018) surveyed women struggling with dyspareunia and found that most of the women reported

enduring a long path of confusion, dismissal, multiple providers, uncertainty, and invalidation before receiving a medical diagnosis.

Conclusion

Dyspareunia is a common and often-overlooked condition affecting women of all life stages within their sexual experiences. Room exists for medical professionals to improve their understanding, compassion, and care for women with dyspareunia, as it has far-reaching affects for her life. Future research opportunities exist in determining the efficacy of certain pharmacologic treatments and developing a treatment guideline to improve consistency among medical providers.

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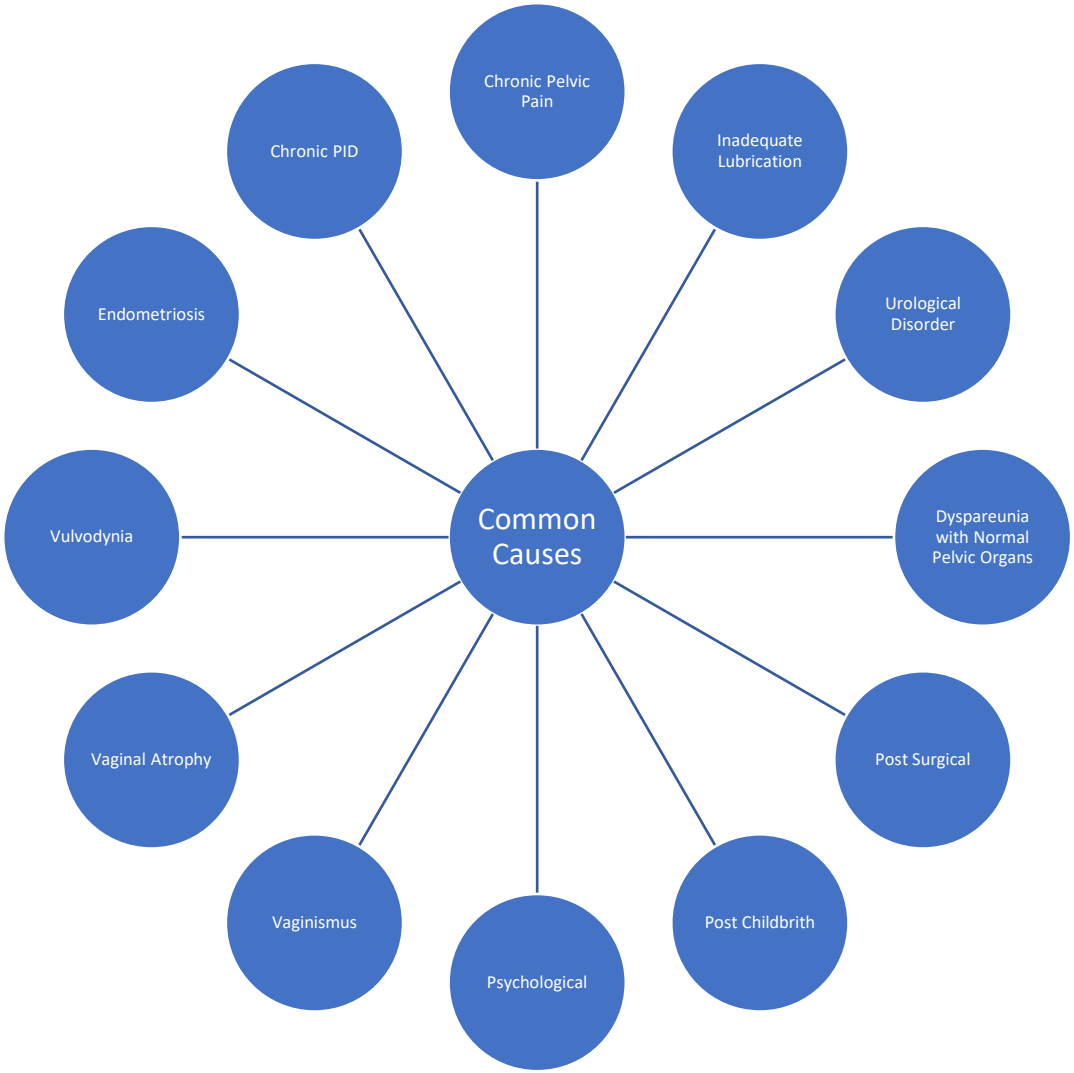
Appendix A

Figure 1: *Causes of Dyspareunia*



(Cassis et al., 2018)