Dyspareunia: a difficult symptom in gynaecological practice

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Abstract

Dyspareunia is pain genital pain associated with sexual function. It is a symptom that has a significant impact on women's health, relationships and quality of life. It is caused by different diseases and has organic and psychosexual components. Despite the high prevalence of sexual pain, few guidelines exist for its evaluation. Obtaining a comprehensive sexual history in an outpatient setting requires professionalism. A systematic and thorough examination of the lower genital tract is necessary to rule out anatomical causes. Other organ systems may need to be assessed from the medical history. Ultrasound may be appropriate to evaluate pelvic organs followed in some cases by diagnostic laparoscopy if there is evidence of endometriosis or utero-vaginal pathology that does not respond to conservative management. Psychosexual causes must be considered when assessing these patients. This article considers the diagnosis and investigation of women complaining of dyspareunia.

Keywords chronic pelvic pain; dyspareunia; endometriosis; pelvic inflammatory disease; vaginismus; vulvodynia

Introduction

Dyspareunia is defined as recurrent genital pain during, before, or after intercourse in either the man or the woman, though it is more common in women. It can be superficial or deep, the latter sometimes associated with endometriosis or pelvic inflammatory disease. The combinations of biological, psychological and interpersonal factors can play a part in the development of dyspareunia.

Usually an initial instigating factor causes pain but patients cannot recall a specific moment when the pain started. Patients can present with well-defined pain or a general dissatisfaction with sex due to discomfort. Obtaining a psychosexual history can provide key information about predisposing factors such as cultural influences on sexuality and possible relationship problems. This article reviews the causes of dyspareunia and outlines assessment however the management of the variety diseases which cause dyspareunia is discussed in other articles.

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Epidemiology

Sexual problems can occur in heterosexual and homosexual relationships. They are reported by almost 43% of women. Between 16% and 75% of women have problems with desire, 16%–48% with orgasm, 12%–64% with arousal, 7%–58% with dyspareunia and 21% with genital lubrication. A recent study found two-thirds of over-60s in the United States were sexually inactive. From the remaining third, 12% who were married had difficulty with intercourse and about 13% experienced dyspareunia. Studies of middle-aged women estimated sexual dysfunction at 33% in the UK. A third of these had at least one defined sexual dysfunction but only 10% thought they had a sexual problem. If few women perceive sexual dysfunction to be a problem, it may explain in part why not many seek medical attention for these conditions, making it difficult to determine the incidence.

Aetiology

Dyspareunia is a symptom of a variety of disease states with components of organic and psychological dysfunction.

Onset

Primary (onset with the first sexual experience):

- Congenital abnormalities
- Psychosocial causes
- Sexual abuse in childhood
- Fear of intercourse or painful first intercourse

Secondary (previously normal sexual function):

Causes are usually physical but often investigations find no cause. Psychological support may be needed.

Frequency

Persistent: Symptoms occur with all partners in all situations.

Conditional: Symptoms occur with certain positions, type of stimulation or specific partner.

Possible causes for both include physical and psychological factors.

Location

Superficial or insertional: Defined as sharp, burning or stinging pain at or near the vaginal introitus on penetration. Commonly found in patients with vulvodynia and vaginismus. Superficial dyspareunia may be also associated with myofascial dysfunction of the perineal body. Other frequent causes include infections such as monilia, herpes, trichomonal vulvovaginitis or menopausal changes (vaginal atrophy). A Bartholin's abscess, previous surgery and childbirth may also cause dyspareunia.

Deep: Defined as pain felt within the pelvis with penile thrusting deep within the vagina. Possible causes include pelvic tumours, endometriosis, previous surgery, pelvic inflammatory diseases and/or retroverted uterus. Different sexual positions may be relevant in aetiology. Some patients felt pain when the penis made contact with the cervix, which can become sensitised by chronic cervicitis and repeated procedures (e.g. biopsies and/or conisation). Pain that comes with orgasm or lasts for several

days may suggest obturator internus related myofascial dysfunction (Box 1).

Common causes

Chronic pelvic pain (CPP)

CPP is defined as any pelvic pain lasting over six months. It is a common complex symptom that can result from multiple urological, gastroenterological, musculoskeletal or gynaecological aetiologies. It affects women of reproductive age. For some, the pain has no clear identifiable cause or can persist despite treatment for a known underlying disorder. Intercourse is often compromised, with pain in about 90% of CPP patients. In the UK, an annual prevalence in primary care of 38/1000 was found in women aged 15 to 73, similar to asthma and back pain. In over 60% of patients no etiological factor for CPP was identifiable and there is no consensus on the management of such patients. This is the hardest group to manage as unidimensional treatments are not helpful and can cause frustration and mistrust, which can lead to a breakdown of the patient-doctor relationship.

Endometriosis

This is one of the most common benign gynaecological conditions, defined as endometrial glands and stroma located outside the uterine cavity. This endometrial tissue responds to hormonal changes and so undergoes cyclical bleeding and local inflammatory reaction. Repeated bleeding and healing leads to fibrosis, causing adhesions. Prevalence is difficult to determine, firstly because of variability in clinical presentation and, secondly, because the only reliable diagnostic test is laparoscopy, when endometriotic deposits can be visualised and histologically confirmed. Population-based studies report a prevalence of 1.5% compared with 6%–15% in hospital-based studies. Endometriosis may be present in about 77% of women with CPP. Common symptoms include pelvic pain, dysmenorrhoea, dyschezia, abnormal menstrual bleeding and infertility. Dyspareunia is usually deep and a prominent symptom in association with uterosacral and/or rectovaginal lesions. Between 60% and 78% of women with deep dyspareunia had positive uterosacral ligament pathology. However, many women with endometriosis are asymptomatic. Often the stage of endometriosis does not correlate with the presence or severity of symptoms. This may be due to symptoms being more related to a local peritoneal inflammatory reaction than the volume of implants.

Chronic pelvic inflammatory disease (PID)

PID is usually caused by sexually transmitted infections that have ascended to the upper genital tract and intraperitoneal cavity. Recent data suggest the rate of definite PID diagnosis in primary care is about 280/100,000. PID's main sequelae include infertility, ectopic pregnancy, chronic pelvic pain and deep dyspareunia. Pelvic adhesions may form after inflammatory processes in the pelvis. Adhesions can cause fixed retroversion of the uterus and may produce deep dyspareunia. But the role of adhesions and deep dyspareunia is controversial. In the absence of fixed retroversion, adhesions may not be the causal factor. Adhesiolysis often fails to improve deep dyspareunia but may benefit a subgroup of women with severe dense and vascularised adhesions involving the bowel.

Vulvodynia

Vulvodynia is a chronic pain that affects the vulvar area and occurs without identifiable cause or visible pathology. Vulvodynia is a diagnosis of exclusion and has been classified by the International Society for the Study of Vulvovaginal Diseases (ISSVD) as generalised or localised (e.g. clitorodynia, vestibulodynia) and then whether provoked or unprovoked. It is akin to a neuropathic pain syndrome. Provoked vestibulodynia is the most common cause in premenopausal women and can be associated with a history of genital-tract infections, former use of oral contraceptives and psychosexual disorder. Generalised vulvodynia, as with patients with neuropathic pain, exhibits

Causes according to location of dyspareunia

Superficial	Deep
Infection	**Infection**
Vulvovaginitis (monilial, herpes and trichomonal)	Pelvic inflammatory disease (pyosalpinx and salpingo-oophoritis)
	Chronic cervicitis
	Repeated cervical trauma
Vulval disease	**Pelvic disease**
Generalized Vulvodynia	Endometriosis
Vestibulodynia Bartholin's cyst	Fibroids Ovarian cysts/ tumours
Vulval dystrophies/ dermatoses	Pelvic congestion
Lichen sclerosis Carcinoma of vulva	
Postmenopausal	
Atrophic changes	
Psychosexual	
Vaginismus	
Post surgery	**Post surgery**
Obstetric sequelae (narrowing of the introitus, episiotomy scar)	Related to childbirth
Pelvic floor repair	Pelvic floor repair
Perineorraphy	Vaginal mesh
	Total hysterectomy
Congenital Vaginal atresia	**Congenital**
Vaginal septum	Incomplete vaginal septum
Urological disorders	**Urological disorders**
Urethritis	Interstitial cystitis/Painful bladder syndrome
Interstitial cystitis/Painful bladder syndrome	
Bowel disorders	**Bowel disorders**
Irritable bowel syndrome	Irritable bowel syndrome
Proctitis	Chronic constipation
	Diverticular disease
Neurologic disorders/ Muscular abnormalities	
Pudendal nerve lesions	
Pelvic floor hyper-hypotonicity	

Box 1