The management of vulval pain syndromes

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Vulval problems are common in gynaecological practice. Pain syndromes of the vulva should be considered once infection and dermatological causes of vulval symptoms have been excluded. This article covers vulval vestibulitis and dysaesthetic vulvodynia, the two subgroups of vulval pain syndromes.

In 1991 the term vulvodynia and its subsets was introduced by the International Society for the Study of Vulval Diseases to describe women with chronic vulval discomfort characterized by burning, stinging, rawness or irritation (Lynch, 1991). The terminology is now under review. In the UK, vulval pain syndrome (VPS) is a more acceptable term to describe vulval pain in the absence of infective or organic pathology. The term VPS incorporates two types of causes – vulval vestibulitis and dysaesthetic vulvodynia – however, the two groups are not mutually exclusive.

This article focuses on vulval vestibulitis and dysaesthetic vulvodynia, and will outline the diagnoses, and discuss aetiology and different treatment options.

DIFFERENTIAL DIAGNOSES OF VULVAL PAIN

Other causes of vulval pain should be excluded before giving a diagnosis of VPS. Vulval malignancies can occasionally present with pain as the primary symptom. Inflammatory vulval diseases such as lichen sclerosis and eczema can cause vulval pain, soreness and itching (Wakelin and Marren, 1997). Some conditions may not be manifest at the time of examination such as a tight posterior fourchette and the fragile fissured vulval syndrome (Nunns, 2000).

Symptomatic dermographism is a rare cause of vulval pain which may be suggested by dermographism evident at other body sites (Lambiris and Greaves, 1996). Other causes include apthous ulceration, erosive lichen planus, bullous disorders and herpes simplex infections. A good history and clinical examination is needed to exclude other rare causes such as sacral meningeal cysts and pudendal canal syndrome (Shafik, 1998).

DIAGNOSIS AND CLINICAL FINDINGS

Vulval vestibulitis and dysaesthetic vulvodynia are separate conditions, however, there are many clinical and aetiological overlaps (Ridley, 1998). The clinical aspects and the management options of these two groups can differ considerably and they should therefore be considered as two distinct groups.

Vulval vestibulitis

Vulval vestibulitis is diagnosed clinically on history and examination. The three criteria for diagnosis are (Friedrich, 1987):

1. Severe pain on vestibular touch or attempted vaginal entry
2. Tenderness to pressure localized within the vestibule
3. The physical finding of erythema confined to the vestibule.

Of these, the second criteria is specific to vulval vestibulitis. To aid diagnosis, a cotton-tipped swab is applied gently to normal skin as a control and then around different areas of the external genitalia. In vulval vestibulitis, pain on light touch is elicited typically in the vestibule area – so-called allodynia where innocuous stimuli cause pain. This hyperaesthesia can be generalized or more focal, involving the opening of the ducts of the major vestibular glands (focal vestibulitis) or the posterior fourchette (Peckham et al, 1986).

The other criteria for diagnosing vulval vestibulitis may also occur with other vulval conditions. Pain on touching the vestibule can occur with a variety of inflammatory or infective vulval conditions, and vestibular erythema is a subjective finding often present on normal examination (Van Beurden et al, 1997).

Typically, women with vulval vestibulitis are caucasian, aged between 20 and 40 years and

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present with a history of provoked pain, such as superficial dyspareunia, tampon intolerance and pain during gynaecological examinations (Friedrich, 1987; McKay 1987; Goetsch, 1991; Marinnoff and Turner, 1991; Schover et al, 1991; Bazin et al, 1994).

Women may have had pain from their first attempt at sexual intercourse or there may have been a period of normal sexual activity with the development of pain subsequently (Goetsch, 1991; Bazin et al, 1994).

A 6-month period of time has been suggested from the onset of symptoms to making a diagnosis of vulval vestibulitis to exclude women recovering from acute vulval inflammation from other causes (Peckham et al, 1986).

Dysaesthetic vulvodynia

Dysaesthetic vulvodynia is a cutaneous dysaesthesia causing non-localized vulval pain. Unlike vulval vestibulitis where pain is provoked, women with dysaesthetic vulvodynia have more constant neuralgic-type pain in the region of the vulva, occasionally involving the perianal area (McKay, 1987, 1993). The nature of the pain is often described as burning or aching (Ridley, 1998). Clinical examination of the vulva is normal. Allodynia seen with vulval vestibulitis is not commonly present and swab tests as previously described are negative (McKay, 1987, 1993). Erythema, if present, may represent normal anatomical variations as mentioned previously.

Women with dysaesthetic vulvodynia are typically perimenopausal or postmenopausal (McKay, 1987, 1993). Superficial dyspareunia is not consistently reported, as many women are less sexually active (Friedrich, 1987). In addition, many experience rectal, perineal and urethral discomfort and there may be an overlap with other perineal pain syndromes (McKay, 1993).

SEXUAL DYSFUNCTION

Sexual dysfunction is common and frequently reported (Schover et al, 1991). Most studies focus on vulval vestibulitis where superficial dyspareunia is the presenting feature. Reduced sexual arousal, more negative sexual feelings and less spontaneous interest in sex (not elicited by a partner) have all been described.

Meana et al (1995) found that women with vulval vestibulitis were more erotophobic than controls and had more conservative attitudes to sex. These are all risk factors for significant psychosexual dysfunction such as vaginismus and anorgasmia.

PREVALENCE

Studies report a prevalence of vulval vestibulitis of 1.3% in UK genitourinary clinics to 15% in private US gynaecology clinics (Denbow and Byrne, 1998; Goetsch, 1991). In some instances up to a third of new referrals to vulval clinics will be patients with either vulval vestibulitis or dysaesthetic vulvodynia (F Wojnarowska, personal communication, 1995). However, the prevalence of VPS within general gynaecology settings remains unknown.

AETIOLOGY

Women with VPS form a heterogeneous group and the cause of symptoms is probably multifactorial. A history of vulvovaginal candidiasis is the single most consistently reported feature reported by women with vulval vestibulitis (Friedrich, 1987; McKay, 1987; Lynch, 1991; Marinnoff and Turner, 1991). However, colonization rates of candida in women with vulval vestibulitis are not increased compared with controls (Sjoberg and Nylander Lundqvist, 1991).

Irritation from topical agents is common as many topical agents are applied, e.g. antifungals and scented hygiene products. Irritation from topical medications is more common on the vulva compared with skin elsewhere, as the stratum corneum functions less efficiently as a protective barrier (Britz and Maibach, 1979). Irritant dermatitis causes vulvitis but settles once the irritant is removed. Although irritation is unlikely to be responsible for initiating symptoms, it may possibly protract symptoms against a background of vulval pain.

There is an increased background incidence of atopy within this group as a whole (Marinnoff and Turner, 1991). Unlike other chronic vulval conditions, however, the incidence of sensitization to allergens in not increased and there is no evidence histologically to confirm or refute an allergic contact dermatitis response (Pyka et al, 1988; Nunns et al, 1997).

A psychosexual cause for symptoms has never been established, although psychosexual dysfunction is more common in these women, usually as a consequence of pain. There is no evidence of an increase in a history of sexual abuse in patients compared with the normal population.

TREATMENT

There is a heavy bias in the literature towards physical treatments which can over-simplify the condition without taking into consideration a more holistic view. It is a mistake to consider the

condition as a ‘skin problem’ that will in the majority of cases be cured with topical agents.

The natural history of the condition remains unknown, but up to 30% of women with vulval vestibulitis may experience resolution of their symptoms without treatment (Peckham et al, 1986). Peckham et al found that approximately 30% of patients had a spontaneous remission of symptoms and in 50% of these resolution occurred within 12 months.

Explaining the condition, allaying any fears and reassuring the woman that the condition is not infectious or related to cancer is essential. Providing women with patient information sheets is often helpful. These are available from the Vulval Pain Society (see useful addresses).

All patients should be encouraged to practice strict vulval hygiene measures when being treated, using only water to clean the vulval area, avoiding any scented products and antiseptics to minimize irritation (Nunns et al, 1997).

Medical treatments

Although topical agents are commonly prescribed, very few controlled studies exist to determine which are the most effective. Local anaesthetic jellies and emollients are generally considered as first-line treatments. Topical lignocaine gel or ointments can be used in women with vulval vestibulitis making penetrative sex possible (Edwards and Wojnarowska, 1998). Application is advised 15–20 minutes before sex and patients need to be warned of irritation. Emollients such as aqueous cream BP or emulsifying ointment BP can also be used liberally on the vulval area (Edwards and Wojnarowska, 1998).

The long-term empirical prescribing of topical medications should be discouraged as this places the woman at unnecessary risk of irritation and contact allergy without any proven therapeutic benefit.

Tricyclic antidepressants have a role in managing dysaesthetic vulvodynia where pain is constant in nature and described as neuropathic (Edwards and Wojnarowska, 1998; McKay, 1993). The response among patients with vulval vestibulitis is variable (Edwards and Wojnarowska, 1998). A dose of amitriptyline 10 mg/day increasing every week until the pain is controlled has been suggested (McKay, 1993). The average dosage is 60 mg/day, although up to 150 mg/day can be used. Imipramine, dothiepin and nortriptyline are alternative drugs (McQuay et al, 1995). The duration of treatment is debatable, but 3–6 months has been suggested (McKay, 1993). Side effects are common, however, they soon settle after 1–2 weeks of treatment. An alternative to tricyclic antidepressants is gabapentin which is given in an increasing dosage.

Surgery

Surgery may be of benefit in some patients with vulval vestibulitis (Kehoe and Leusley, 1996; Nunns, 2000). Careful selection is required and all other treatment options should have been exhausted. The procedure that yields the best result is the modified vestibulectomy where a horseshoe-shaped area of the vestibule and inner labial fold is excised followed by dissection of the posterior vaginal wall (Kehoe and Leusley, 1996; Nunns, 2000). The vaginal tissue is then advanced to cover the skin defect. Postoperative complications are uncommon and there is evidence that women who respond to lignocaine gel before sex have a more successful outcome (Kehoe and Leusley, 1996). The vestibuloplasty, where the vestibule is excised then replaced so to sever the nerve supply to the skin, is not an effective procedure (Bornstein et al, 1995).

Many studies are flawed and most fail to account for concurrent treatments or factors that may also be responsible for the improvement of symptoms. The variable success rates may, in part, reflect the selection of patients for surgery. Many earlier studies not only included patients with vulval vestibulitis, but others without vestibular hyperaesthesia suggestive of dysaesthetic vulvodynia in whom surgery is unsuccessful (Peckham et al, 1986; Reid et al, 1995).

The success rates of surgery can be improved with adjuvant therapy to help rehabilitate the patient postoperatively (Schover et al, 1991; Abramov et al, 1994). In their series of 32 patients with vulval vestibulitis, Schover et al found that preoperative psychological assessment and postoperative sex therapy increased the success rates of surgery. Patients did better even with one session of psychosexual counselling to help overcome pelvic floor muscle hypertonia and poor vaginal lubrication. Vaginal dilators have also been suggested postoperatively (Abramov et al, 1994).

Only one study showed no benefit of a surgical approach to women with vulval vestibulitis and advocated a behavioural approach. In Weijmer et al’s series (Weijmer et al, 1996), patients with vulval vestibulitis were randomized to surgery or a behavioural approach using pain management strategies, sex education, partner therapy and pelvic floor exercises (Reid et al, 1995). Both groups achieved similar results and patients preferred the behavioural approach to surgery.

The multidisciplinary approach

Women with VPS are a heterogeneous group with different degrees of physical pain, psychosexual issues and coping strategies. Patients with long-term pain should be regarded as having a chronic pain syndrome. A referral to a chronic pain team may be of benefit and a cognitive-behavioural assessment has been suggested to complement the physical treatments (Edwards and Wojnarowska, 1998; Ridley, 1998).

Clinical psychologists can teach patients coping mechanisms, pain management strategies and can address the patient's expectations of treatment (Melzack, 1980). Sessions with psychosexual counsellors can aid sexual rehabilitation by improving physical non-coital sexual contact, helping to overcome pelvic floor muscle hypertonia using sensate focus therapy and addressing secondary psychosexual dysfunction such as low libido and anorgasmia (Schover et al, 1991). In addition, physiotherapists are ideally suited to provide biofeedback therapy. **HM**

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Useful address

Vulval Pain Society
PO Box 7804
Nottingham NG3 5ZQ
http://www.vul-pain.dircon.co.uk/

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KEY POINTS

- Vulval pain syndrome is a term used to describe vulval pain in the absence of infective or organic pathology.
- The term vulval pain syndrome incorporates two types of causes – vulval vestibulitis and dysaesthetic vulvodynia – however, the two groups are not mutually exclusive.
- Although medical treatments and surgery have their place in their management, treatment of these conditions can not be based on treatment of a 'skin problem' and a more holistic approach must be adopted.
- Patients with long-term pain should be regarded as having a chronic pain syndrome and managed as such.