

Focus

Vulval pain disorders

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Vulvodynia is a general term used to describe a group of painful conditions of the vulva. Burning vulva syndrome has also been used by some authors. The title of a paper written by Dr P Lynch in 1986 says it all – *Vulvodynia; a syndrome of unexplained vulvar pain, psychologic disability and sexual dysfunction*.¹

The terms "dynia" and "itis" are disguises for our ignorance and hopefully will be replaced by more aetiological descriptions when our knowledge grows.^{2,3} For example, the epidemiology of non-specific urethritis clearly suggests a sexually transmitted infectious cause.

There are two major subtypes of vulvodynia - essential (dysesthetic) vulvodynia and vulvar vestibulitis. There are several differences between these two groups.

ESSENTIAL VULVODYNIA

Essential vulvodynia is the least common. This condition appears in older women, average age 65. They are peri or postmenopausal or have had a hysterectomy. The discomfort is diffuse and described as a generalised burning/smarting sensation. The skin is not tender to touch or pressure and dyspareunia is not usual. Erythema is often obvious. They may have pelvic floor or lumbar spinal problems. The pain may involve the inner thigh.⁴

Some patients have histories of herpes zoster or herpes simplex. The disorder may be a type of pudendal neuralgia.⁵ However, this does not

Key points

- The two main groups of vulvodynia are essential vulvodynia or vulvar vestibulitis
- Essential vulvodynia is less common and occurs in older women; treatments include tricyclic antidepressants
- Vulvar vestibulitis is common and found in younger women, who often have dyspareunia and associated psychological distress
- Treatments for vulvar vestibulitis include topical agents, low strength steroids, NSAIDs, low dose tricyclic

explain the erythema and inflammation seen unless this is a consequence of treatment (contact dermatitis or steroid atrophy/rebound). Treatments suggested are tricyclic antidepressants, eg, amitriptyline. Other drugs suggested include phenytoin, carbamazepine and clonazepam.

antidepressants,
physical therapy
and support
groups

VULVAR VESTIBULITIS

The second type of vulvodynia is by far the commonest and affects a younger age group. This is called vestibulitis, focal vulvitis or vulvar vestibulitis syndrome. With the growth of specialist multidisciplinary clinics dealing with vulval disease, this distressing condition has had much exposure and literature discussion in the past 10 years. About one-third of the patients referred to the specialist vulval clinics are diagnosed with this condition. It may be that the younger patients are selected by our clinic being run in conjunction with a sexual health department but in view of the numbers of elderly ladies presenting with lichen sclerosus this is probably not the reason.^{6,14}

Anatomically the vestibule is that portion of the inner vulva exterior to the hymenal ring extending laterally to Hart's line (marking the junction of the non keratinised and keratinised skin of the inner labia minora) and is often characterised by a row of sebaceous glands. Anteriorly the vestibule finishes at the frenulum of the clitoris and posteriorly at the fourchette.

The vestibule is of endodermal origin as is the bladder and urethra.¹³ The Bartholin's glands and the lesser Skene's and periurethral glands open into the vestibule. The lining membrane is non-keratinised squamous epithelium and midway between mucosa and skin. Vestibulitis is a chronic, non infectious inflammatory disorder of this epithelium.⁷

The commonest age at presentation is in the 20s. The primary symptom is superficial introital dyspareunia, often sharply localised. The women are nulliparous and have typically had previous pain free intercourse. The pain is described as burning as if the skin is raw and can be induced by tampon insertion and by any pressure on the affected area. Sometimes intercourse is impossible and there is a "protective" spasm of the levator muscles on elicitation of the pain.

Fear of the pain leads to a vicious cycle of failure of muscle relaxation and lubrication prior to intercourse. Following intercourse the burning feeling can last for hours. In some cases the problem has existed since puberty and the first use of tampons (primary vestibulitis). This is much less common.

Clinical findings

The clinical findings are of eroded-looking erythematous areas usually located in the posterior vestibule at five or seven o'clock tucked in the fold between the hymenal remnants and the inner labia minora. Less commonly the affected areas can be in the anterior vestibule below the urethra.

It may be difficult to visualise these areas due to pain and magnification is useful. The inflamed area can be very well demarcated but can extend across the fourchette to both sides. The areas sometimes have a "granular" appearance.

The pain and spasm can be induced by pressure from a cotton tipped bud. There is no discharge. These findings are very specific and unlike no other condition. Vaginal discharges and infections such as trichomoniasis, candidiasis and alterations of pH, as in cytolytic and bacterial vaginosis, can sometimes produce a stinging sensation but are usually easily excluded by the abnormal discharge observed and the wet mount, Gram stain and culture. If the onset is acute, herpes simplex may sometimes need exclusion.

Psychological distress

There is often considerable and understandable psychological distress for the patient and their partner. Some studies have shown these patients to be more anxious and somatising than other women; appearing to be more hypochondriacal and to have consulted more physicians than others attending a vulvar clinic. I feel the conclusion must be that these findings are expected with a condition of this nature.

Other papers have shown these patients to not differ from the general population except in terms of their negative feeling with regard to sex with their partner. Interestingly, masturbation is not affected.^{8,10} The cause is unknown and the syndrome can last for months. Even biopsies do not reveal an aetiological agent. A mixed inflammatory infiltrate of lymphocytes and plasma cells is found diffusely in the superficial stroma not associated with the vestibular glands.⁹

Findings of koilocytosis in the vulvar skin led to the belief that the HPV virus could be responsible for some cases and provoked aggressive laser therapy and intralesional interferon in the 1980s. It is easy to be misled by normal vestibular papillae and acetowhite findings to conclude that wart virus could be present. Warts, however, rarely produce pain. Due to the high prevalence of warts in the population it would be expected that many vestibulitis patients had this virus, especially if sensitive HPV-DNA detection methods are used.

Management

Patients are usually very pleased and relieved that the condition is recognised by clinicians. Referral to a clinic or institution which has a combined clinical approach and experience of dealing with these cases is suggested. Management will include addressing the trilogy of inflamed skin, muscle spasm and psychological overlay. Careful avoidance of topical irritants is counselled. Advice concerning the use of extra lubrication before penetrative intercourse is given.

A variety of topical agents can be useful including local anaesthetics, low strength steroids and non-steroidal inflammatory such as ketoconazole cream. Submucosal injection of steroid is sometimes used.

The secondary muscle spasm component has been investigated and it is found that the levator muscles are more active and "set" at a higher level than normal. Pelvic floor training and re-education can be accomplished by physical therapists with an interest in this syndrome. Bio-feedback techniques and behavioural therapy have also had excellent results.

Tricyclic antidepressants such as amitriptyline in relatively low dose are useful also. A pain syndrome conceptualisation
Fear of the pain leads to a vicious cycle of failure of muscle relaxation and lubrication prior to intercourse is suggested as the most useful approach.¹¹ Subtotal perineoplasty surgery is only used now for the most extreme cases.

Oxalate theory

Some patients will have researched this condition and have learned about the "oxalate" theory which holds that urinary oxalates irritate the tissues. Treatment is advocated with a low oxalate diet and oral calcium citrate. The basis of much of this therapy and many others can be found on Dr Howard Glazer's website _ www.vulvodynia.com _ which is a fund of information, albeit not all medically validated. The bibliography and links, however, are an excellent starting point for those interested in this condition.

For this sometimes chronic condition of poorly understood cause, support groups can be of much help. Women who share this problem can develop joint strategies to overcome physical and emotional hurdles. We ran one of these groups in Wellington Sexual Health Clinic during 1998 which was very successful.¹²

References

1. Lynch PJ. Vulvodynia: a syndrome of unexplained vulvar pain, psychologic

- disability and sexual dysfunction. *Journal of Reproductive Medicine* 1986; 31 (9): 773-780.
2. Wesselman UR. The Dynias-Review. *Seminars in Neurology* 1996; 16 (1):63-74.
 3. Dennerstein G. *Proceedings 2nd Symposium, Diseases of the Vulva and Vagina*. Melbourne, 1997.
 4. McKay M. Dysesthetic (essential) vulvodynia. Treatment with amitriptyline. *J Reprod Med* 1993; 38: 9-13.
 5. Turner M, Marinoff SC. Pudendal neuralgia. *Am J Obstet Gynecol* 1991; 165:1233-1266.
 6. Marinoff SC, Turner M. Vulvar vestibulitis syndrome: an overview. *Am J Obstet Gynecol* 1991; 165:1228- 1233.
 7. Oates DE, et al. Focal vulvitis and localised dyspareunia. *Genitourin Med* 1990; 66: 28-30.
 8. Stewart DE et al. Vulvodynia and psychological distress. *Obstet Gynaecol* 1994; 84: 587-590.
 9. Pyka, et al. The histopathology of the vulvar vestibulitis syndrome. *Int J Gynaecol Path* 1988; 7: 249-257.
 10. Van Lankveld J, et al. Psychological profiles of and sexual function in women with vulvar vestibulitis and their partners. *Obstet Gynaecol* 1996; 88: 65- 70.
 11. Bergeron, et al. Vulvar vestibulitis syndrome: a critical review (80 references). *Clinical Journal of Pain* 1997; 13:27-42.
 12. Wade M. Burning vulva syndrome group: an important treatment choice at Wellington Sexual Health Service. (in press) 1999.
 13. Fitzpatrick C, et al. Vulvar vestibulitis and interstitial cystitis: a disorder of urogenital sinus- derived epithelium. *Obstet Gynaecol* 1993; 81:860-861.
 14. Fischer G. The commonest causes of symptomatic vulvar disease: a dermatologist's perspective. *Aust J Derm* 1996; 37:12-18.

PRACTICE TIP - CERVICAL SCREENING

From Practice Nurse Delwyn Hodgson, Katikati Medical Centre

I recently devised this simple, but exceedingly successful, letter which is sent to women in our practice who have failed to respond to letters and telephone calls to attend for overdue cervical screening. To our surprise, out of the woodwork popped so many women that our cervical screening rate climbed to a healthy 87 per cent. It seems the letter conveys a sense of abandonment by the practice which is responded to positively by attending promptly. Therefore I offer the text of the letter in a spirit of cooperation to assist other practices.

"Dear...

Since we have not had a response from you to our two previous notifications that you are overdue for a cervical smear, I will now take you off our computer recall system until I hear from you.

If you wish to have a smear with your doctor or practice nurse, please telephone _ _ _ _ _ for an appointment.

Regards"