REVIEW ARTICLE

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Guidelines for the management of vulvodynia

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Summary

These guidelines for the management of vulvodynia have been prepared by the British Society for the Study of Vulval Diseases Guideline Group. They present evidence-based guidance for treatment, with identification of the strength of evidence available at the time of preparation of the guidelines.

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Introduction and background

This guideline is to help clinicians assess and manage patients with vulvodynia. Vulvodynia has been defined by the International Society for the Study of Vulvovaginal Diseases (ISSVD) as vulval discomfort, most often described as a burning pain, occurring in the absence of relevant visible findings or a specific, clinically identifiable, neurological disorder. Patients can be further classified by the anatomical site of the pain (e.g. generalized vulvodynia, hemivulvodynia, clitorodynia) and also by whether pain is provoked or unprovoked (see Table 1).

Clinical care should follow the principles of general chronic pain management. Treatment should be holistic and focus not only on the primary site of pain but on its subsequent impact on the patients' lifestyle and sexual functioning. The evaluation of different treatments is very difficult because published research on vulvodynia has many limitations with poor patient selection, limited follow-up data and a paucity of randomized clinical trials (RCTs).

Methods

The evidence for these guidelines was reviewed by the British Society for the Study of Vulval Diseases (BSSVD) guidelines group looking at all published literature on vulvodynia to date. The group consists of gynaecologists, dermatologists, genitourinary physicians and patients. We searched the literature using the terms 'vulvodynia', 'vestibulodynia', 'vulval pain' and 'vestibulitis'. The classification of evidence levels and grades of recommendations for this review are given in Appendix 1. Table 2 gives a summary of the following recommendations

Recommendation 1

An adequate pain history should be taken to assess the degree of symptoms and the impact on the woman. The clinician should categorize which subgroup of vulvodynia the patient has according to the ISSVD definitions (e.g. provoked/unprovoked pain).

Grade of recommendation C; evidence level IV

Vulvodynia has many subsets and patients should be classified according to the subsets defined by the ISSVD (Table 1). Management will be different for each subset. The removal of such terms as 'vestibulitis' from the ISSVD terminology, as identified by Haefner,[1] in preference for the heading of 'provoked vulvodynia' will we hope avoid any further confusion, as the suffix 'itis' implies inflammation, which is not proven to be present in this condition.

A detailed pain history should be taken. The use of visual analogue pain scales and pain diaries may be helpful in quantifying the degrees of pain. Quantitative assessment of pain levels may involve standardized pain assessment tools such as the McGill Pain Questionnaire.

Pudendal neuralgia, an entrapment nerve syndrome, can present with symptoms similar to vulval pain but the management may be different. Patients with pudendal neuralgia usually experience pain on sitting and the pain is relieved by standing or lying.[2]

Recommendation 2

If appropriate, patients with sexual pain (dyspareunia) should have a sexual history taken to identify sexual dysfunction.

Grade of recommendation C; evidence level IV

If there are sexual problems patients should have an adequate sexual history taken asking specifically about the presence of vaginismus, adequate lubrication during intercourse, anorgasmia and partner problems. Identification of psychosexual morbidity is important as psychosexual counselling may be necessary to complement the medical treatments being offered. Sexual dysfunction is common and frequently reported.[3,4] Most studies focus on provoked pain 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.[5]

Psychological morbidity is significantly higher in women with vulvodynia compared with asymptomatic women.[3,4,6] Many studies demonstrate high degrees of anxiety, depressive symptoms, somatization disorders and hypochondriacal symptoms,[3,4,6] but there is no evidence for a primarily psychological cause for pain.[7,8]

Table 1 International Society for the Study of Vulvovaginal Diseases (ISSVD) classification of vulval pain

A. Vulval pain related to a specific disorder
1 Infectious (e.g. candidiasis, herpes, etc.)
2 Inflammatory (e.g. lichen planus, lichen sclerosus, immunobullous disorders, etc)
3 Neoplastic (e.g. Paget's disease, squamous cell carcinoma, etc.)
4 Neurological (e.g. herpes neuralgia, spinal nerve compression, etc.)
B. Vulvodynia
1 Generalized
1 Provoked (sexual, nonsexual, or both)
2 Unprovoked
3 Mixed (provoked and unprovoked)
2 Localized (vestibulodynia: previously known as vulval vestibulitis, clitorodynia, hemivulvodynia, etc.)
1 Provoked (sexual, nonsexual, or both)
2 Unprovoked
3 Mixed (provoked and unprovoked)

Source: ISSVD 2005.

Table 2 Summary of recommendations

An adequate pain history should be taken to assess the degree of symptoms and the impact on the woman. The clinician should categorize which subgroup of vulvodynia the patient has according to the International Society for the Study of Vulval Diseases (ISSVD) definitions (e.g. provoked/unprovoked pain)
If appropriate patients with sexual pain (dyspareunia) should have a sexual history taken to identify sexual dysfunction
The diagnosis of vulvodynia is clinical
A team approach may be necessary to address the different components of vulvodynia. A lead clinician should triage patients and consider referral to other health professionals who have a role in vulvodynia management, e.g. psychosexual medicine, physiotherapy, pain management teams
Combining treatments should be encouraged
Patients should be given an adequate explanation of their diagnosis, relevant written information and suggested contact information. When prescribing treatments clear instruction should be given on how to take medication
Topical agents should be used with caution to avoid the problem of irritancy. A trial of local anaesthetic agent may be considered in all vulvodynia subsets
Tricyclic antidepressant drugs (TCAs), e.g. amitriptyline or nortriptyline, are an appropriate initial treatment for unprovoked vulvodynia. Other drugs may be considered including gabapentin and pregabalin which can be given in addition to a TCA
Surgical excision of the vestibule may be considered in patients with local provoked vulvodynia (vestibulodynia) after other measures have been tried. Only a minority of patients may be suitable for surgery. If surgery is offered, adequate counselling and support should be given to the patient both pre- and postoperatively
Pelvic floor muscle dysfunction should be addressed in patients with vulvodynia who have sex-related pain. Techniques to desensitize the pelvic floor muscles are likely to be beneficial
Acupuncture may be considered in the treatment of unprovoked vulvodynia
Intralesional injections may be considered in patients with provoked vulvodynia

Recommendation 3

The diagnosis of vulvodynia is clinical.

Grade of recommendation C; evidence level IV

The diagnosis of vulvodynia is clinical. Biopsies of the symptomatic areas are not necessary in order to make a diagnosis as there are no specific histological pathological features. Several authors have reported the presence of a chronic inflammatory infiltrate in the biopsies of symptomatic areas; however, this has been refuted by others who have noted similar patterns of inflammation in controls.[9–12] Clinicians should be vigilant about the development of other problems during treatment which might subsequently require a biopsy. Patch testing is not indicated to exclude contact allergy.[13] The routine use of magnetic resonance imaging is also not necessary in those patients with unprovoked pain as the incidence of pathology, for example sacral cysts, causing referred pain to the vulva is very low.[14]

Recommendation 4

A team approach may be necessary to address the different components of vulvodynia. A lead clinician should triage patients and consider referral to other health professionals who have a role in vulvodynia management, e.g. psychosexual medicine, physiotherapy, clinical psychology, and pain management teams.

Grade of recommendation B; evidence level IIb

A multidisciplinary approach to patient care with vulvodynia is preferable. The level and amount of care provided are obviously dependent on the individual needs of each patient. Some patients may be happy seeing a medical consultant at timed intervals to suit their needs. For patients with sexual pain a psychosexual approach may be required.[15] For unprovoked pain a more extensive pain management approach may be necessary with cognitive behavioural therapy and supportive psychotherapy input.[16]

Involvement of a pain clinic may be necessary in difficult cases. Nair *et al.*, describe a case of a woman with severe vulvodynia symptoms who was unresponsive to opiates, but she did gain relief from a spinal cord stimulator.[17]

Recommendation 5

Combining treatments should be encouraged.

Grade of recommendation C; evidence level IV

Combining treatments may be appropriate as different treatment strategies tackle different facets of chronic vulval and sexual pain. In the series reported by Munday *et al.* of 29 patients treated with a combination of medical treatments, psychotherapy, physiotherapy and dietary advice, 27 were significantly better including nine who were pain-free.[15] Surgical removal of the vestibule (vestibulectomy) has a better outcome when patients have psychosexual input.[3,18]

Recommendation 6

Patients should be given an adequate explanation of their diagnosis, relevant written information and suggested contact information. When prescribing treatments, clear instruction should be given on how to take medication.

Grade of recommendation C; evidence level IV

It is essential to explain the condition to the patient, allaying any fears and reassuring her that the condition is not infectious or related to cancer. Providing women with patient information sheets is often helpful (see Appendix 2). Minimizing exposure to contact irritants from everyday products will help, and use of inappropriate topical agents, e.g. antifungal creams, should be discouraged.

Recommendation 7

Topical agents should be used with caution to avoid the problem of irritancy. A trial of a local anaesthetic agent may be considered in all vulvodynia subsets.

Grade of recommendation C; evidence level IV

Although topical agents are commonly given to women with vulvodynia, few controlled studies have been done to determine which are the most effective. One randomized trial suggested a high placebo response.[19] Topical lidocaine gels or ointments can be used in women with provoked vestibulodynia making penetrative sex possible. It is generally advised that the application is 15–20 min prior to sex and patients need to be warned of irritancy. It is important to warn patients of potential effects to the partner such as penile numbness (male partners may want to wear condoms), and to avoid oral contact.

Regular uses of local anaesthetic on the areas of tenderness have had some benefit in reducing the allodynia response on the vulva.[20] In a study by Zolnoun *et al.*, 5% lidocaine ointment was applied liberally to the affected area at night, and then a cotton wool ball soaked in 5% lidocaine was inserted into the vestibule and left overnight in a group of patients with vulvodynia (mainly provoked pain). At follow-up there was an improvement from 36% to 76% of women reporting the ability to have intercourse.[20] This management option would be best suited to those with provoked vulvodynia.

Many other topical agents have been suggested including capsaicin cream, ketoconazole cream, oestrogen creams, steroid creams, interferon and nifedipine with mixed results.[19,21,22]

Recommendation 8

Tricyclic antidepressants (TCAs), e.g. amitriptyline or nortriptyline, are an appropriate initial treatment for unprovoked vulvodynia. Other drugs may be considered, including gabapentin and pregabalin, which can be given in addition to a TCA.

Grade of recommendation B; evidence level IIb

TCAs are an appropriate pharmacological management option in the treatment of vulvodynia, in particular for unprovoked pain.[18] Amitriptyline, the best studied tricyclic, is increased according to the patient's pain level (10 mg daily increasing every week until the pain is controlled has been suggested).[23,24] The average dosage is 60 mg daily (although up to 100 mg daily can be used). Side-effects in some patients might influence the compliance with treatment and these should be discussed with the patient.[24] In Munday's series, a 47% complete response rate to TCAs for generalized pain was reported in 33 women attending a vulval clinic.[18]

Other drugs that can be tried if patients are intolerant or not responding to the TCA include gabapentin and pregabalin at an increasing dosage. Gabapentin can be started at 300 mg orally and increased by 300 mg every 3 days to a maximum dosage of 3600 mg daily.[25] The optimal drug treatment for vulvodynia remains unclear due to a lack of well-conducted trials.

Recommendation 9

Surgical excision of the vestibule may be considered in patients with local provoked vulvodynia (vestibulodynia) after other measures have been tried. Only a minority of patients may be suitable for surgery. If surgery is offered, adequate counselling and support should be given to the patient both pre- and postoperatively.

Grade of recommendation B; evidence level IIb

Surgery may benefit a minority of patients with provoked pain. The procedure that yields the best result is the modified vestibulectomy in which a horseshoe-shaped area of the vestibule and inner labial fold is excised followed by advancement of the posterior vaginal wall.[26–29] There is evidence that women who respond to lidocaine gel prior to sex have a more successful outcome and a failure to do so should be considered as a relative contraindication to surgery.[26] In the series of Kehoe and Leusley on 37 patients with provoked vulvodynia, 59% had a complete response, 30% had a partial response and 11% had no response. The median follow-up was 10 months.[26] Vestibuloplasty, where the vestibule is excised then replaced so as to sever the nerve supply to the skin, is not an effective procedure.[30] The long-term follow-ups of most studies remain uncertain, but one retrospective series reported that 83% of patients questioned at 1 year would recommend the surgery as an effective treatment of localized provoked vulvodynia.[31] Success rates of surgery can be improved with postoperative sex therapy, which can also include the use of vaginal dilators.[13,32]

Only one RCT in the management of vulvodynia exists. In the series of Bergeron *et al.*, patients with vestibulodynia were randomized to surgery or a behavioural approach using pain management strategies, sex education, partner therapy and pelvic floor exercises.[33] Both groups achieved similar results and patients preferred the behavioural approach rather than surgery. Adequate evaluation of vestibulectomy was limited in this trial by the absence of systematic follow-up of pretreatment dropouts in the surgical arm, and so intention-to-treat analysis was conducted on estimated rather than actual collected data.

Laser vaporization of the vestibule for provoked vulvodynia was introduced in the mid-1980s in an attempt to destroy hyperaesthetic skin but is not recommended.[34]

Recommendation 10

Pelvic floor muscle dysfunction should be addressed in patients with vulvodynia who have sex-related pain. Techniques to desensitize the pelvic floor muscles are likely to be beneficial.

Grade of recommendation B; evidence level IIb

Patients with vulvodynia who have sex-related pain frequently have pelvic floor muscle dysfunction.[35] This vaginismus 'response' can be addressed with physical therapy. Patients can be taught a variety of self-help techniques including pelvic floor exercises, external and internal soft tissue self-massage, trigger point pressure, biofeedback and use of vaginal trainers.[36,37] One study reported success with a vaginal transcutaneous electrical nerve stimulation machine.[38] No studies report on the optimal technique and success will depend on a number of factors including the therapist, degree of patient support, and time and number of sessions. These therapies aim to desensitize the pelvic floor area. In the series reported by Bergeron *et al.* with 35 women, physical therapy yielded a complete or great improvement for 51% of participants and a moderate improvement for 20% of participants.[39]

Biofeedback therapy has been used successfully to help overcome pelvic floor muscle dysfunction in women with provoked vulvodynia.[40,41]

The value of physical therapy in patients with unprovoked pain remains unclear. Electromyographic studies of the pelvic floor in women with unprovoked pain have shown differences compared with asymptomatic patients; however, no studies have been carried out to address the value of physical treatment.[42]

Recommendation 11

Acupuncture may be considered in the treatment of unprovoked vulvodynia.

Grade of recommendation C; evidence level IIb

Powel and Wojnarowska's series of 12 patients who had not responded to conventional treatment included two patients who felt significant improvement and three who believed their symptoms had improved and wished to continue acupuncture treatment.[43] A large part of its beneficial effect, as recognized by the authors, may come from the regular specialist contact. The value of acupuncture in provoked pain is not clear.

Recommendation 12

Intralesional injections may be considered in patients with provoked vulvodynia.

Grade of recommendation B; evidence level III

Various combinations of drugs have been suggested. Murina *et al.* gave subcutaneous injections of 40 mg methylprednisolone acetate and lidocaine in 10 mL of normal saline into the vestibule in 22 women with vestibulodynia with a 32% complete remission rate.[44] Similar positive results were obtained in trials looking at betamethasone and lidocaine infiltration.[45,46]

Botox injections to treat allodynia have been suggested but the benefits are not currently clear.[47–50] The Botox effect is likely to be temporary meaning repeat treatment may be necessary.

Conclusions

These guidelines act as a starting point to aid doctors and other healthcare professionals in the diagnosis and management of vulvodynia, and to increase awareness and education on the condition. The clinician should play a role in the assessment and diagnosis of vulvodynia and liaise with colleagues in difficult cases. Team work should be nurtured and developed.

What's already known about this topic?

- A vulvodynia classification
- International Society for the Study of Vulvovaginal Diseases (ISSVD) definitions for vulval pain
- Psychological morbidity in women with vulvodynia

What does this study add?

- A structured approach towards managing vulvodynia
- Recommendations for managing vulvodynia
- An evidence base for the recommendations

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Appendix 1

Classification of evidence levels

Ia Evidence obtained from meta-analysis of randomized controlled trials
Ib Evidence obtained from at least one randomized controlled trial
IIa Evidence obtained from at least one well-designed controlled study without randomization
IIb Evidence obtained from at least one other type of well-designed quasi-experimental study
III Evidence obtained from well-designed nonexperimental descriptive studies, such as comparative studies, correlation studies and case studies
IV Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

Grades of recommendations

A Requires at least one randomized controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (Evidence levels Ia, Ib)
B Requires the availability of well-controlled clinical studies but no randomized clinical trials on the topic of recommendations (Evidence levels IIa, IIb, III)
C Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (Evidence level IV)

Appendix 2

Patient information sources

Vulval Pain Society
PO Box 7804, Nottingham, NG3 5ZQ, U.K.
http://www.vulvalpainsociety.org

British Pain Foundation
Third Floor Churchill House
35 Red Lion Square, London WC1R 4SG, U.K.
http://www.britishpainsociety.org/patient_publications

British Society for the Study of Vulval Disease
http://www.bssvd.org