2023 UK National Guideline on the Management of Vulval Conditions

Clinical Effectiveness Group British Association Sexual Health and HIV

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Guideline development group membership

Sarah K Edwards (Consultant GU Physician), Fiona Lewis (Consultant Dermatologist), Imali Fernando (Consultant GU Physician), Lisa Haddon (Associate Specialist in Dermatology)

Lead Editor from CEG: Dr Deepa Grover

New in the 2023 Guidelines

Updated terminology for vulval intraepithelial neoplasia

Acute vulval ulceration

Introduction and Methodology

Objectives

This guideline offers recommendations on the management of a range of vulval disorders that may present to Genitourinary Medicine clinics. As the scope of vulval disease is wide, the guideline concentrates on specific conditions which may be managed by Genitourinary Physicians, either alone or in conjunction with other specialists, dependent on local expertise. Guidance for onward referral is also included. It is not intended as a comprehensive review of the treatment of all vulval disease. The main categories of non-infective vulval disease are dermatoses, pain syndromes and pre-malignant conditions.

This guideline offers recommendations on the diagnostic tests and treatment regimens needed for the effective management of the following vulval conditions:

- Lichen sclerosus
- Lichen planus
- Eczema
- Lichen simplex
- Psoriasis
- Vulval high-grade squamous intra-epithelial lesions (previously vulval intraepithelial neoplasia)
- Vulval pain
- Non sexually acquired acute genital ulceration (Ulcer of Lipschutz)

It is aimed primarily at the management of people aged 16 years or older presenting to Genitourinary Medicine clinics.

Search Strategy.

This document was produced in accordance with the guidance set out in the CEG's document 'Framework for guideline development and assessment' at http:/www.bashh.org/guidelines. search strategy including search terms, sources and dates of the literature reviewed, databases of systemic reviews, conference proceedings and other guidelines consulted

Three reference sources were used to provide a comprehensive basis for the guideline:

1. Pubmed, Medline and Embase Search up to March October 2021

The search strategy comprised the following terms in the title or abstract:

Vulval lichen sclerosus/vulvar lichen sclerosus/lichen sclerosus et atrophicus

Vulval lichen planus/vulvar lichen planus

Vulval eczema/vulvar eczema/vulvar dermatitis

Vulval lichen simplex/vulvar lichen simplex

Vulval psoriasis/vulvar psoriasis

Vulval intraepithelial neoplasia/high-grade squamous intrepithelial lesion/HSIL

Vulval pain syndromes/vulvodynia

Vulval ulcer

Ulcer of Lipschutz

2. British Association of Dermatology Guidelines on the management of lichen sclerosus https://onlinelibrary.wiley.com/doi/full/10.1111/bjd.16241
3. Cochrane Collaboration Databases (www.cochrane.org)

Methods

Article titles and abstracts were reviewed and if relevant the full text article obtained. Priority was given to randomised controlled trial and systematic review evidence, and recommendations made and graded on the basis of best available evidence (Appendix 1). There is a lack of high-quality available evidence for many vulval conditions, so where no high-quality evidence was available relevant case literature was reviewed and a decision made by the writing panel on appropriate management.

Equality Impact assessment

To be completed

Piloting and Feedback

The guidelines have been reviewed and approved by an expert patient, and also by the BASHH patient and public engagement panel.

Guideline statement of the management of vulval conditions

Patients with vulval conditions may present to Genitourinary Medicine Physicians, Dermatologists and Gynaecologists and experience in treatment modalities will vary across this spectrum. The care of patients with vulval conditions is therefore best delivered by a multidisciplinary approach[1]. This includes clear working arrangements between disciplines or access to a specialist multidisciplinary vulval service. Services should also have access to clinicopathological discussion.

General Advice for all vulval conditions [1,2,3] (2,D)

- Avoid contact with soap, shampoo and bubble bath. Simple ointment based emollients can be used as a soap substitute and general moisturiser
- Avoid tight fitting garments which may irritate the area
- Avoid use of condoms lubricated with spermicides
- Patients should be given a detailed explanation of their condition with particular emphasis on any long-term implications for the health of themselves and their partner(s). This should be reinforced by giving them clear and accurate written information [4,5,6]
- The patient's GP should be informed.
- Sexually transmitted infection (STI) screening should be considered, and vulvovaginal candidiasis, either as a primary cause for symptoms or a secondary or co-existing issue, excluded if relevant.
- All patients should be assessed for sexual dysfunction

Sexual partners

- Partner tracing is not required unless screening detects a sexually transmitted infection.

VULVAL LICHEN SCLEROSUS

Lichen sclerosus (LS) is the most common dermatosis to primarily affect the ano-genital skin and is more common in women than men. The estimated lifetime incidence of LS is

1.6% - 3% [7,8]. It can occur in children, but these guidelines relate to the management of LS in adult females. Full guidelines that include management in children and young people are published by the British Association of Dermatologists [9].

Aetiology

LS is an inflammatory dermatosis of unknown aetiology. There is evidence to suggest that autoimmune factors may be involved in its pathogenesis and autoantibodies to extracellular matrix protein 1 have been demonstrated in some patients [10]. There is an increased frequency of other autoimmune disorders in females with LS [11] and it is therefore likely that there are immunopathogenic mechanisms involved in the aetiology of LS [12].

Clinical features

Symptoms include:

- Itch – this is usually the predominant feature
- Soreness
- Dyspareunia
- Urinary symptoms including dysuria. Although LS does not affect the urethra, severe fusion of the labia minora may impede the urinary stream
- Other symptoms: for example, constipation, can occur if there is significant perianal involvement
- LS can be asymptomatic, but this is rare

Signs

The main areas affected in LS are the labia majora, labia minora, clitoral hood and perianal skin. It does not affect the vagina. Extra-genital lesions may be found in up to 10% of patients.

- Pallor, often atrophic but can be hyperkeratotic in atypical variants
- Purpura (ecchymosis) is common and pathognomonic of LS
- Loss of architecture can lead to resorption of the labia minora and/or midline fusion with introital stenosis. The clitoral hood may be tethered or sealed over the clitoris, but the clitoris itself is not affected.
- Erosions
- Lichenification and hyperkeratosis can occur, but these are atypical features and can be a feature of differentiated vulval intraepithelial neoplasia (dVIN)
- Changes may be localized (the clitoral hood is a common site) or in a 'figure of eight' distribution including the perianal area

Complications

- Development of squamous cell carcinoma (SCC). The actual risk is estimated at <5% [13] and there is evidence that this can be further reduced by effective control of the disease [14].
- Development of a clitoral pseudo cyst – this can occur if there is sealing of the

clitoral hood with debris building up under the hood. Rarely a pseudocyst can become infected, requiring drainage or antibiotics

- Sexual dysfunction
- Urinary symptoms
- Vulvodynia
- Reactivation of latent Herpes simplex virus (HSV) or Human papillomavirus (HPV) infections can occur with active disease or the use of potent topical steroid treatment

Diagnosis

The diagnosis of LS can usually be made on the characteristic clinical appearance and ideally should be confirmed with biopsy, especially in younger women. The typical histological features in LS are epidermal atrophy, with sub-epidermal hyalinisation of collagen and a lymphocytic dermal infiltrate. In early disease, histology can be non-specific and difficult to interpret [15].

A biopsy is essential in the following circumstances [9] :

- Diagnosis uncertain
- Atypical features
- Any suspicion of dVIN or SCC
- Failure to respond to first line treatment
- Development of atypical pigmented areas

Further investigation

- Investigation for autoimmune disease if clinically indicated, especially thyroid dysfunction (i.e. thyroid autoantibodies and TSH) as it can commonly be present together with lichen sclerosus (2,C).
- Skin swab: only useful to pick up co-existing infection if there are symptoms or signs suggestive of this.
- Patch testing is rarely required and only if a secondary medicament allergy is suspected.

Treatment

<u>General advice</u>

Patients should be informed about the condition and given information (either written or web-based). Vulval irritants and allergens, including routine cleansing products, should be avoided. Daily emollients are useful and can also be used as a soap substitute. These should be continued for genital skin care even after discontinuing topical steroid treatment [16]. Ointment bases are preferred to cream based treatments for use on the anogenital skin because of the reduced need for preservatives in an ointment base, thus reducing the risk of irritation and secondary contact allergy.

Patients should be made aware of the small risk of neoplastic change but the majority of patients with well controlled disease will not experience this. Patients should be advised

to contact the doctor if they notice anogenital skin symptoms that fail to respond to treatment or an alteration in the appearance or texture of the skin.

Recommended regimen

There is overwhelming evidence for the use of an ultra-potent topical steroid such as clobetasol propionate as first line treatment for LS [9, 17] (1,A). A tapering induction regimen of the topical steroid, applied once daily for one month, alternate days for one month and then twice weekly for one month, is recommended [9, 18]. The patient should be reviewed at three months and the treatment must then be individualised. Most patient can use treatment as needed for recurrent symptoms, but some will need it once or twice weekly to maintain control of symptoms and signs [14,19]. There is no evidence on the optimal regimen, but 30 g of an ultra-potent steroid should last at least three months. The question as to whether life-long maintenance treatment is required is unanswered and the subject of further research.

Alternative regimens

- Mometasone furoate can be used if there is intolerance to clobetasol propionate and has been shown to be equally effective [20] (1,B).
- A combination preparation including a topical steroid and antibacterial or antifungal may be useful for a short period if there is secondary infection (2,D)

Other treatments

- Topical calcineurin inhibitors are not licensed to treat LS and long-term safety and efficacy is not established. There are studies to show efficacy of both tacrolimus 0.1% [21] (2, B) and pimecrolimus 1% [22] (2, B). However, a randomized controlled trial demonstrated that they are inferior to ultra-potent topical steroids [23]. Local irritation was the most common side effect with both tacrolimus and pimecrolimus but usually improved after the initial period of use. There is concern that the immunosuppressive effect of these agents may potentially increase the background risk of squamous cell carcinoma associated with the condition and it is therefore recommended that these agents are not used as first line for LS [24,25].
- Oral retinoids may be effective in severe hyperkeratotic disease [26] (2,B) but should only be prescribed by a dermatologist experienced in the use of these agents. They are severely teratogenic and pregnancy must be avoided for two years after finishing treatment.
- UVA1 phototherapy has been reported as successful in a small number of cases but this is not easy to deliver to genital skin and is mainly used for extra-genital disease [27,28] (2.D)

The use of laser treatment and adipose derived stem cells and platelet rich plasma is not recommended as there is no good evidence for their use [29,30].

Pregnancy and breastfeeding

LS tends to improve during pregnancy and there is no contra-indication to vaginal delivery provided the LS is well controlled and the introitus is not significantly stenosed [31]. It is safe to use topical steroids while pregnant or breastfeeding although topical calcineurin inhibitors are contra-indicated. Oral retinoids are absolutely contra-indicated during pregnancy and for at least two years before due to their high teratogenic risk.

Onward referral criteria

Those with active disease that has not responded adequately to treatment should be referred to a specialised vulval clinic. Any patient who develops dVIN or high-grade intra-epithelial lesion (HSIL) or an SCC on a background of LS should be seen and followed up in a multi-disciplinary vulval clinic led by experienced clinicians. Surgery should generally only be used for the treatment of coexistent HSIL/Squamous cell carcinoma (SCC) or fusion, and careful post-operative topical steroid application must be used to prevent recurrence [32]. (2, D)

Follow-up

Initial follow-up should occur after three months to assess response to treatment, followed by visits at 6 and 12 months after to assess control and ongoing treatment required [6]. Stable disease should be regularly reviewed by the GP, with referral back to the clinic if there is a

change of symptoms or signs. This must be clearly communicated to the patient and GP by the vulval clinic.

Auditable outcome measures

Biopsy should be performed in patients with atypical features, those not responding to an initial course of steroid treatment or if raised or ulcerated lesions develop. Target 100%

Written or web-based information should be given to all patients Target 100%

VULVAL LICHEN PLANUS

Aetiology

Lichen planus (LP) is an inflammatory disorder which can affect the skin, oral and genital mucous membranes and, less commonly, the lacrimal duct, oesophagus and external auditory meatus. It may also involve hair and nails, causing a scarring alopecia and nail dystrophy. LP is an inflammatory condition of unknown pathogenesis but it is probably an immunological response by activated T cells. Weak circulating basement membrane zone antibodies have been shown to be present in 61% of patients with erosive lichen planus of the vulva [33]. There may be overlap between lichen sclerosus and lichen planus [34] and they are reported to occur together in the some patients [35].

Clinical features

Symptoms

- Itch – in classic and hypertrophic types
- Soreness – in erosive LP
- Dyspareunia
- Urinary symptoms
- Vaginal discharge
- Can be asymptomatic

Signs

The anogenital lesions of lichen planus are generally classified into three main groups according to their clinical presentation:

1. Classical - typical papules will be found on the keratinised anogenital skin, with or without striae on the inner aspect of the vulva. Hyperpigmentation frequently follows their resolution, particularly in those with darker skin types. This type of lichen planus may be asymptomatic: in one study vulval lesions were found in 19 out of 37 women with cutaneous lichen planus, with four of the 19 having had no symptoms [36].

2. Hypertrophic - these lesions are relatively rare and can be difficult to diagnose. They particularly affect the perineum and perianal area, presenting as thickened warty plaques which may become ulcerated, infected and painful. Because of these features, they can mimic malignancy. They do not appear to be accompanied by vaginal lesions.

3. Erosive - the most common subtype to cause vulval symptoms. The mucosal surfaces are eroded. At the edges of the erosions, there is a pale lilac/mauve lace-like network (Wickham's striae). It is important that the vaginal lesions in erosive lichen planus are recognised and treated early as they can lead to scarring and complete stenosis. These lesions consist of friable telangiectasia with patchy erythema, which are responsible for the common symptoms of post-coital bleeding, dyspareunia and a variable discharge which is often serosanguinous. As erosions heal, synaechiae and scarring can develop [37]. This subtype of LP is also seen at the oral mucosa.

The term vulvo-vaginal gingival syndrome (VVG) is used when erosive disease occurs in these three sites and may have a specific genetic association [38]. The presenting symptoms are usually soreness, dyspareunia and sometimes a blood-stained vaginal discharge.

Complications

- Scarring, including vulval and vaginal adhesions
- Development of SCC – this is mainly linked to the hypertrophic type. In one study, the incidence was 3% [39] but in other studies no cases of LP were associated with SCC [40]. Malignant change is not thought to be linked with VVG type erosive LP.

Diagnosis

The diagnosis is made on the characteristic clinical appearance and involvement of the vagina excludes LS. Characteristic skin changes elsewhere can be helpful for confirming the diagnosis. Diagnostic criteria for erosive LP have been formulated after a Delphi consensus exercise [41] and appear to be clinically applicable [42]. Differential diagnosis includes immunobullous disorders such as pemphigus which can look clinically similar to erosive lichen planus. The lichenoid variant of graft versus host disease is clinically identical but the history will obviously be suggestive of this condition.

Histopathology – the typical features of LP are easily seen in classic and hypertrophic types but may be non-specific in erosive LP as the epidermis is lost. The best place to take a biopsy is across the edge of the erosion where the characteristic changes of irregular saw-toothed acanthosis, increased granular layer and basal cell liquefaction are most likely to be found. There is a band-like dermal infiltrate mainly composed of lymphocytes.

Investigation

- Biopsy – this is a necessity if the diagnosis is uncertain or coexistent HSIL or SCC is suspected. Direct immunofluorescence should be performed if an immunobullous disease is considered within the differential diagnosis.
- Investigation for autoimmune disease, especially thyroid disease, should be undertaken if there is a strong family history or symptoms suggestive of disease (2, C.) There is significant difference in the incidence of auto-immune disease and of

circulating antibodies in patients with LP compared to controls [43].

- Skin swab - to exclude secondary infection, especially of excoriated lesions, as clinically indicated.
- Patch testing - if secondary medicament allergy or contact dermatitis suspected.
- A link with hepatitis C and occasionally hepatitis B has been noted in some Mediterranean countries, but there is no evidence of any increased incidence in LP patients in the UK and routine screening is not thought necessary [44].

Treatment

Patients should be informed about the condition and given information (written or web-based). Patients should be made aware of the very small risk of neoplastic change in hypertrophic LP and should be advised to contact the doctor if they notice a change in symptoms or the appearance of a persistent lump or ulcer.

Topical treatment

1. <u>Topical steroids</u>

The first line treatment is an ultra-potent topical steroid, such as clobetasol proprionate (1,B). In a study of 114 patients in a vulval clinic, 89 used ultra-potent topical steroids as first-line treatment, of whom 75% improved and 54% became symptom free. However, in only 9% was there resolution of signs of inflammation [39]. There is no evidence to indicate the optimal regimen. Maintenance treatment is usually required and can either

be with weaker steroid preparations or less frequent use of potent steroids. A combination preparation of topical steroid and antibiotic or antifungal may be helpful if secondary infection is a concern.

Delivery of corticosteroids to the vagina is not easy. Prednisolone suppositories may be used in more severe cases (2,D). A dilator coated with clobetasol propionate is an alternative method of applying the treatment.

2. Topical calcineurin inhibitors

Both tacrolimus [45,46] and pimecrolimus [47] show benefit in small cases series (2,C) but are often poorly tolerated at the vulva. There are also concerns about reactivating viral infections.

Systemic treatments

There is no consensus and little evidence base for the use of systemic agents. All systemic therapies have potentially serious side-effects needing careful monitoring and are best supervised by a dermatologist in the context of a specialised clinic (1,C). Patients will often require a combination of treatment to achieve the optimum results [48].

Oral steroids can be used for severe flares, for example, prednisolone 30-40mg/day tapered off over a few weeks. Oral retinoids can be helpful in hypertrophic LP but are severely teratogenic and therefore unsuitable for younger patients. Small case series

show some benefit for methotrexate [–49-51], hydroxychloroquine [52] and mycophenolate [53, 54] (2,C). These are generally used in tandem with topical steroids. Oral ciclosporin has been used in isolated cases [55] (2,D).

Biological agents have been used in oral and cutaneous disease. Basiliximab has been reported to be effective in cutaneous non-genital and oral LP [56] but its use has not been evaluated in vulval disease. In a series of 5 patients with mucosal LP treated with rituximab, efficacy was not demonstrated [57]. However, there are increasing reports of lichen planus being induced by biological treatment and so these are not widely used.

Other treatments

a. Photodynamic therapy (PDT)

There is one randomised controlled trial of PDT versus topical steroids which showed similar clinical outcomes [58] (2,C)

b. Surgery

Surgical management is required for severe adhesions with functional sequelae. This should be done by specialist surgeons and careful post-operative treatment with topical steroids is vital to prevent rapid re-fusion [59]. (2,D)

Pregnancy and breastfeeding

Vulval LP is rare in younger women and topical steroids are safe to use while pregnant or breastfeeding. Topical calcineurin inhibitors are contra-indicated whilst pregnant or

breastfeeding. Oral retinoids absolutely contra-indicated during pregnancy and for at least two years before conception.

Onward referral

Referral to a multidisciplinary vulval clinic is recommended for patients with erosive LP, especially the VVG variant, as these patients may have disease at other important sites e.g. oesophagus, lacrimal duct. Any treatment recalcitrant cases, or those in whom systemic therapy is considered, should be seen in the context of a specialised clinic.

Follow-up

- At 2–3 months to assess response to treatment.
- Active disease should be assessed as clinically required. Erosive lichen planus needs long-term specialised follow-up (1,D).
- Stable disease should be reviewed annually except in well-counselled patients who control their symptoms well. If review is by the GP this should be communicated to the patient and GP by the vulval clinic.

Auditable outcome measures

Biopsy should be performed in patients not responding to an initial course of treatment, if raised lesions develop or an ulcer or erosions persist. Target 100%

VULVAL ECZEMA

Female genital skin is delicate and the environment is naturally warm and moist. It is therefore common for all different types of eczema (also termed dermatitis), including atopic, contact (both irritant and allergic type) and seborrhoeic, to involve this site. The peri-anal skin and the natal cleft are also sometimes involved. In studies reviewing specialist vulval clinics, vulval dermatitis accounted for 20 – 55% of women presenting to these services [60-64].

Aetiology

Vulval atopic eczema

Atopic eczema is one of the commonest skin diseases in developed countries, with up to 15-20% of the population affected. It is considered multifactorial in aetiology, with disease resulting from environmental triggers (including stress) in genetically predisposed individuals (a family history is one of the commonest risk factors for eczema) [65]. This genetic predisposition is frequently mediated through a gene mutation affecting the structural epidermal protein filaggrin, leading to disturbance of the normal epidermal barrier function and increased epidermal susceptibility to allergens and microbes, with resulting chronic inflammation. Patients with atopic eczema frequently have a history of other atopic disease, including asthma, allergic rhinitis and food allergies. It is not uncommon for women with atopic eczema to have genital skin involvement.

Contact dermatitis

Contact dermatitis is common, with the irritant type being more frequent than allergic. Allergic dermatitis is a Type IV delayed hypersensitivity reaction, manifesting after repeat exposure of sensitised skin to an allergen. A very wide variety of topical products can cause both irritant and allergic contact dermatitis of the genital skin (table 1). This is considered to be secondary to excretion of these product constituents in urine, faeces or sweat, contaminating the genital skin. Clinically relevant contact allergens have been identified in between 5-45% of women presenting with vulval symptoms (pruritis). [57, 64-71]. Topical medicaments, fragrances and preservatives were among the most commonly identified allergens [67-798]. There are also reported cases of vulval allergic dermatitis secondary to orally ingested products, including spices and peppermint oil in peppermint tea. [66, 67]. Irritant dermatitis is commonly caused by prolonged contact with body fluids, such as urine and faeces, and also by excessive sweating and increased vaginal discharge. Irritation can also be caused by some spermicides and lubricants, overzealous cleansing of genital skin and excessive friction from exercise (such as regular cycling), as well as the use of tight or synthetic material underwear.

Table 1: causes of irritant and/ or allergic contact dermatitis of the genital skin

- Skin cleansing products – soap, shower gels
- Bathing products – bubble baths, bath oils
- Feminine hygiene products – douching and deodorant products, talcum powder, perfumes
- Menstrual sanitary products – menstrual pads, tampon strings

- Pubic hair depilatory products
- Incontinence products – pads, panty liners
- Perfumed and/ or coloured toilet paper, wet wipes
- Cloth and cloth washing products – cloth dyes, laundry powders (especially biological laundry powders), fabric conditioners
- Dyes used in pubic and genital region tattoos
- Topical medications:
    - topical antifungals (e.g. clotrimazole)
    - topical antibiotics (e.g. neomycin)
    - wart treatments
    - haemorrhoid treatments
    - local anaesthetic preparations (e.g. benzocaine, procaine, tetracaine)
    - topical corticosteroids
- Antiseptic cleansing preparations (e.g. Dettol, Savlon, Tea tree oil and TCP)
- Sexual intercourse related products – condoms, diaphragms, lubricants, spermicides
- Body fluids - urine, faeces, sweat, vaginal discharge, (rarely) semen
- Physical causes – overwashing of skin, excessive friction (e.g. cycling, horse riding), use of too tight or synthetic material underwear

1

2 *Seborrhoeic eczema*

Seborrhoeic eczema occurs in the sebaceous gland rich areas of the body in genetically predisposed individuals. It commonly affects the face (eyebrows, naso-labial folds, frontal scalp), but can occasionally also affect the axillae, inframammary areas and ano-genital skin. The pathology of seborrhoeic eczema is incompletely understood but appears to be an overexuberant inflammatory reaction to colonisation with a non-pathogenic yeast species (Malassezia). Differences in the individual's skin lipid barrier may play a role in the cutaneous manifestations, as it is commoner in individuals with oily skin and a family history of the disease. Seborrhoeic eczema also manifests more commonly in some immune disorders (e.g. HIV, lymphoma, transplant recipients), neurological and psychiatric diseases (e.g. Parkinson's disease, epilepsy, depression) and can be triggered by stress reactions.

Lichen simplex

Vulval lichen simplex is most commonly associated with atopic eczema or psoriasis, where chronic scratching leads to lichenification i.e. thickened, slightly scaly, pale or earthy-coloured skin with accentuated markings. Features maybe more marked on the side opposite the dominant hand. Contributing or precipitating factors include:

- Underlying dermatoses, i.e. atopic dermatitis, psoriasis, allergic contact dermatitis.
  Systemic conditions causing pruritus, i.e. renal failure, obstructive biliary disease (primary biliary cirrhosis and primary sclerosing cholangitis), Hodgkin's lymphoma, hyper- or hypothyroidism and polycythaemia rubra vera

- Environmental factors: heat, sweat, rubbing of clothing, and other irritants such as harsh skincare products.
- Psychiatric disorders: anxiety, depression, obsessive-compulsive disorder, and dissociative experiences are often associated with the condition. Emotional tension in predisposed people (i.e. those with an underlying predisposition for atopic dermatitis) can induce itch and thus begin the chronic itch-scratch cycle[,80, 81]

Clinical features

Symptoms and signs of vulval eczema are generally similar to that of eczema at non-genital skin: patients usually describe itch and discomfort of the affected area. Clinical examination reveals erythematous inflammation with poorly demarcated margins. There may be fissuring present. The skin appears very dry (xerosis), slightly scaly and, if chronic disease, may be thickened and lichenified from scratching. There may be excoriation marks present.

Irritant contact dermatitis is commonly confluent and restricted to the area directly affected by the irritant product. This is in contrast to allergic contact dermatitis, where the skin affected may be patchy and margins are commonly more diffuse and spread beyond the area in direct contact with the implicated allergen. Allergic contact dermatitis symptoms and signs usually present 48-72 hours after exposure of the previously sensitised skin to the allergen. In severe allergic contact dermatitis, the genital skin will appear extremely inflamed and oedematous, sometimes also with weeping, blisters and erosions.

Seborrheic eczema usually presents as mildly pink, glazed appearance, poorly defined patches with a slight greasy scale. Skin changes can affect pubic region, groin flexures and natal cleft, as well as the vulva.

Lichen simplex shows characteristic lichenification, often with excoriations, and there may be loss of pubic hair in affected areas.

Diagnosis

The diagnosis of vulval eczema is usually on the basis of history and clinical examination. The differential diagnosis includes psoriasis, candidiasis, tinea cruris and scabies.

Patients with atopic vulval eczema commonly have a past or family history of atopic dermatitis at non-genital sites and/ or other atopic complaints. Similarly, patients with vulval seborrheic eczema frequently have lesions at other sites, including at the skin around eyebrows and nostrils. It is important therefore that careful examination is undertaken of non-genital skin as well as at the vulva, peri-anal region and natal cleft.

It is important to elicit a careful history of possible genital irritants and allergens for patients suspected of vulval contact dermatitis, as well as a history of any previous contact dermatitis at non-genital sites.

Investigation

- Biopsy is usually not required for the diagnosis of vulval eczema but, if undertaken, a characteristic histological feature is spongiosis. Biopsy should be considered in atypical presentations or if there is failure to respond to treatment.
- If allergic contact dermatitis is suspected, a referral for patch testing is useful for identifying the offending allergens [82] (1,B).

Management

The cornerstone of vulval eczema management is patient education in meticulous genital skin care, including the regular use of prescribed emollients and soap substitutes [83] (1,A). Patients should be warned about the recurrent nature of the condition. All potential genital skin irritants and allergens, as described previously, must be identified and excluded. It is important to note that some commonly prescribed soap substitutes, such as aqueous cream, and antibacterial preparations may themselves cause an irritant dermatitis if left on the skin without being washed off.

Table 2: Skin care advice

• Advise patients to avoid washing their hair in the bath • Advise patients to avoid use of any abrasive materials to clean their genital skin, including loofahs and washcloths • Wet skin should be gently patted dry, avoiding any friction.

- Advise patients to use breathable loose cotton underwear (or no underwear)
- Advise patients to avoid use of tights, leggings and tight jeans
- Advise reduction of friction at genital sites e.g. by avoiding long distance cycling

- It is essential that patients suffering from urinary or faecal incontinence have this appropriately managed to reduce the impact on their genital skin. Bland barrier creams may also be useful for protecting the skin in such cases. In general, ointment based topical treatments are preferable to cream-based ones for use at delicate genital skin, due to the reduced presence of potential allergens as excipients in these preparations.
- It is good practice to warn patients that topical treatments may affect the integrity of barrier contraceptives (e.g. condoms and diaphragms). If the type of contraceptive cannot be switched, then it is useful to advise that any topical medications are applied at least a few hours prior or following to the planned use of these contraceptives.

Recommended treatment [84]

There is a paucity of evidence specifically relating to the management of eczema on the vulval skin.

- Patients with active inflammation can be treated with mild to moderate topical steroid preparations applied once daily (1,C). There is no clear evidence on the optimum duration of treatment.

- Combined preparations of a mild steroid + antimicrobial cream (e.g. clobetasone with nystatin and oxytetracycline) may be useful, as vulval eczema is frequently complicated by mild bacterial and candidal superinfection (1,D). However, some steroid antimicrobial combined treatments (especially Neomycin containing preparations) can themselves result in allergic contact dermatitis, so vigilance is required. It is also preferable therefore to limit combination treatment preparations to a few weeks' duration of use at one time and then switch to a pure mild steroid preparation following this if further treatment is required.

Alternative regimens

- If significant inflammation and lichenification are present (e.g. in Lichen Simplex), a short course of a potent topical steroid (e.g. mometasone fumorate), applied once daily as a reducing course for a period of 2-3 months, is usually necessary for effective treatment, before swapping to a milder preparation.
- For very severe cases of allergic contact dermatitis, a short course of oral corticosteroids (20mg Prednisolone for 5-7 days) in addition to potent topical steroids can be helpful for enabling fast symptom control. This requires specialist dermatology expertise and urgent referral is recommended.
- Topical calcineurin inhibitors have been used in the treatment of vulval eczema but can cause side effects of stinging discomfort [85, 86]. (2, C)

- If secondary candidal or bacterial infection of the skin is suspected, it is preferable to utilise oral therapy for these patients, to prevent exposure to any further allergens.
- Where nocturnal itch is a significant symptom, a sedating antihistamine (e.g. 10-50 mg Hydroxyzine per day), may be prescribed for reducing itch and its impact on sleep. Cool compresses or a cool gel pack may also help alleviate some vulval skin itch and discomfort.
- Cognitive behavioural therapy has been used for management of itch in persistent cases.

Follow up

Patients with vulval eczema do not routinely require any long term follow-up. Patients with severe symptoms or poor response to therapy should be reviewed, including to identify any ongoing exposure to vulval skin irritants and allergens, or to assess for neuropathic causes of ongoing itch.

Auditable outcomes

- Patients should be given a full explanation of their condition (including the risk of recurrence) with written or web-based information. Target 100%

VULVAL PSORIASIS

Aetiology

Psoriasis is a chronic inflammatory epidermal skin disease, affecting approximately 2% of the general population. Genital psoriasis may present as part of generalised plaque or flexural psoriasis or, uncommonly, as the only area of skin affected. Genital lesions can be found in over 60% of patients with psoriasis through their lifetime [87] but are often overlooked [88]. Genital psoriasis can have a significant impact on quality of life [89]. It can be more severe in patients with HIV infection [90].

Clinical features

Symptoms

- Pruritus
- Soreness
- Dyspareunia

Signs

- Well-demarcated brightly erythematous plaques, usually symmetrical, on outer labia majora and mons pubis. May extend into inguinal folds, peri-anal skin and natal cleft.
- Scaling is rarely seen due to the moist environment
- Fissuring
- Involvement of other sites, e.g. scalp, umbilicus, nails

Complications

Secondary candidiasis and streptococcal infection can occur and worsen symptoms

Diagnosis

The diagnosis is generally clinical as the signs are characteristic. General examination of the patient will frequently reveal disease at other sites.

Investigation

Biopsy should be performed if there are atypical features or a lack of response to treatment. However, the histological features in flexural psoriasis are often more spongiotic and clinico-pathological correlation is important.

Treatment

Recommended regimens [91, 92]

- Avoidance of irritating factors.
- Use of a bland emollient soap substitute.
- Topical corticosteroids – weak to moderately potent topical steroids are preferred (1,B) but if insufficient to induce a response, then intensive short-term potent steroids such as betamethasone dipropionate 0.05% may be used. Patients are usually treated with a tapering regimen over 3 months. A combined preparation containing a topical steroid and antifungal and/or antibiotic may be required if secondary infection is suspected and if there is active fissuring (2,C)

- Topical calcineurin inhibitors – these are unlicensed for use in genital psoriasis but there is evidence for efficacy [93]. (2,C)
- Weak coal-tar preparations – these may be used alone or combined or alternated with topical steroids. However, these preparations can cause irritation and folliculitis (2,D).
- Vitamin D analogues (e.g. Talcalcitol) – can be used alone or in combination with a topical corticosteroid; however, their usefulness may be limited due to causing local irritation (2,D).

Onward referral

- Referral to a specialist dermatology clinic is recommended for unresponsive or recalcitrant cases, or those in whom systemic therapy is considered.
- Systemic treatment may be required for severe and extensive psoriasis. These can help genital lesions but are not recommended for isolated genital psoriasis. There is evidence for the use of biological agents [94] (2,C) and PDE-4 inhibitors in the management of genital psoriasis [92]. Genital lesions may not respond as well as disease at other sites [95]. (2,C)
- Pregnant women should be referred for specialist advice.

Follow-up

- Mild disease – as clinically required.

- Severe disease – (i.e. when using potent topical steroids) three months then as required.

Auditable outcome measures

Patients should be given a full explanation of their condition with written or web-based information. Target 100%

SQUAMOUS INTRAEPITHELIAL LESIONS (SIL) (previously VULVAR INTRAEPITHELIAL NEOPLASIA (VIN)

Vulvar intraepithelial neoplasia is a premalignant lesion of the vulval skin. It is now classified as low grade (low-grade squamous intraepithelial lesions, LSIL), high grade (high-grade squamous intraepithelial lesions, HSIL), and differentiated type (dVIN) [96]. The incidence of both HSIL and dVIN are rising, with rates of HSIL of approximately 3 per 100 000 woman-years in one study [97]. LSIL are HPV related benign lesions but are included in the new classification although they have no malignant potential and management is as per guidelines for management of genital warts [98]. LSIL may regress spontaneously, but HSIL and dVIN can lead to squamous cell carcinoma of the vulva.

Aetiology

The predominant type is HSIL, accounting for 95% of cases and is caused by persistent human papillomavirus (HPV) infection, most commonly Type 16. This generally presents in younger

women with a peak age range of 35-49 years. The risk is higher with smoking and in immunocompromised women [99]. The differentiated type (dVIN) accounts for less than 5% of cases and is associated with vulval lichen sclerosus and less commonly lichen planus (particularly the hypertrophic type)[100], and presents in an older age group[101].

Clinical Features

Symptoms

- Burning and itch / irritation
- Pain / soreness
- The presence of a lump or thickening
- Asymptomatic

Signs

- Clinical appearance is very variable and HSIL lesions may present as white, erythematous or pigmented plaques, frequently somewhat warty in appearance. Multifocal lesions are common. dVIN may be difficult to differentiate from the underlying lichen sclerosus (LS), but present as treatment resistant lesions which differ from surrounding disease [102]. They can be hyperkeratotic, erosive or ulcerated. They occur most commonly at the non-keratinised vestibule, including around the clitoris, labia minora and vaginal introitus, and also inner labia majora. The next most common site is the perineum and perianal skin, in keeping with LS distribution [101].

Complications

- The main complication is of progression to vulval squamous cell carcinoma. The risk is significantly higher in the dVIN group compared to patients with HSIL (50% vs 10% progression).[97]
- Multifocal disease. This is commoner in HSIL and further lesions may occur anywhere in the anogenital area [101]. There is an association with immunosuppression [103].
- Recurrent disease. This is commoner in older women, multifocal disease, lichen sclerosus, persistent HPV infection and positive excision margins [104]. Recurrence rates were nearly 30% in one study [105].
- Psychosexual issues [106]

Diagnosis

Definitive diagnosis is by biopsy. Multiple samples should be taken from all affected areas to map disease.

Histological findings [107]

- HSIL – There is disruption of the architecture, high nuclear-to-cytoplasmic ratios, hyperchromasia, pleomorphism, cytological atypia and mitoses
- dVIN – Histology can be difficult to interpret. Findings include acanthosis, occasional parakeratosis, and irregular elongation and anastomoses of the rete ridges. If clinically suspected, histology should be reviewed by expert pathologists.

- Basal layer atypia is the single unifying feature of vulval pre-neoplasia, and immunohistochemistry may help - P16 block patterning in HSIL and p53 staining in dVIN [102].

Further investigation

- Clinical review of the vagina, cervix and perianal area is recommended due to the high rate of multizonal disease in HSIL. This is not relevant for non-HPV associated dVIN
- Ensure that cervical screening remains up to date in those with HSIL.

Treatment

General Advice

General skin care advice should be given. Patients should be informed about the condition and given information (either written or web-based). They should also be made aware of the risk of malignant transformation and risk of recurrence and advised to contact their doctor if they notice any new areas, or change in the surface appearance.

Women with both HSIL and dVIN, especially if multicentric disease or with immunosuppression should be followed up in either specialist multidisciplinary vulval clinics or by gynaecological oncologists. This is to provide the full range of surgical treatments, reconstructive surgery, nonsurgical alternatives and colposcopic follow-up [108]

Recommended regimens [109, 110]

dVIN

- In view of the high rate of malignant transformation, surgical excision is recommended [111-112]. Depending on the extent of disease, partial vulvectomy may be required [108]

HSIL

Surgical treatment

- Local excision is the recommended treatment for well circumscribed lesions, although there is a paucity of good quality evidence [110-112].

Medical treatment

- Imiquimod cream 5% [109, 113,114]

<u>Alternative regimens</u>

HSIL – cidofovir 1% gel applied three times weekly [109,110, 113,114]

Ablative techniques - laser therapy has been used. The latter has been shown to have similar recurrence rates to excision in a small trial but is not recommended on hair bearing skin [112].

There is preliminary data reported on a trial comparing medical and surgical treatment, but further data are awaited [115].

Comparison of HSIL and dVIN

	HSIL	**dVIN**

Aetiology	HPV infection	Vulval lichen sclerosus / lichen planus
Age affected	35-49 years	Usually postmenopausal
Proportion of cases	95%	5%
Malignant transformation	c10%	c50%
Presentation	Erythematous or pigmented plaques, frequently somewhat warty in appearance. Multifocal lesions are common.	Difficult to differentiate from LS Treatment resistant lesions
Histology	Disruption of the architecture, high nuclear-to-cytoplasmic ratios, hyperchromasia, pleomorphism, cytological atypia and mitoses. P16 block patterning	Can be difficult to interpret. p53 staining
Treatments	1. Local excision (preferred) 2. Imiquimod	1. Surgical excision recommended because of high rate of malignant change 2. Partial vulvectomy may be required

Human papillomavirus (HPV) vaccines

Prophylactic HPV vaccines have shown efficacy for the prevention of HPV 16 and 18 related HSIL [116], however a systematic review failed to find any high-quality evidence for a

treatment effect [117]. There is insufficient evidence to support routine clinical use of a vaccine as an adjuvant with surgical treatment [118].

Follow-up

Close follow-up is mandatory for HSIL and dVIN. In view of high risk of multifocal disease, follow up of HSIL should include regular cervical cytology and vaginal examination [108]. The cervical cytology screening frequency is as guided by the routine cervical cytology screening programme guidance.

Pregnancy and Breast feeding

Imiquimod and cidofovir are not licensed in pregnancy, so excision or ablation are preferable.

Onward referral

Cases of VIN should be assessed in a multidisciplinary vulval clinic and be linked to a gynae-oncology centre.

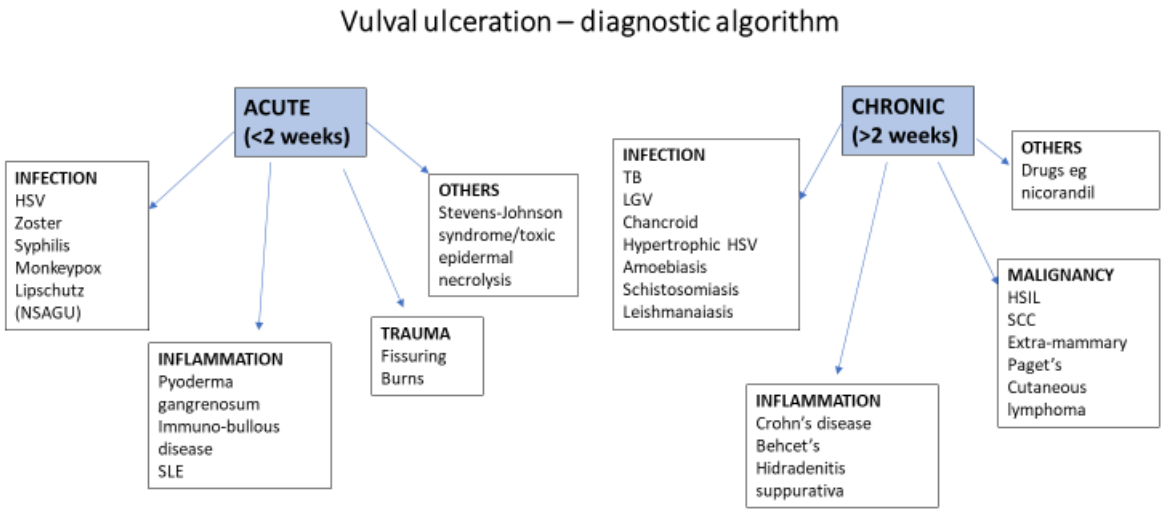
Auditable Outcome Measures

Cases of HSIL and dVIN should be reviewed in a multidisciplinary vulval clinic Target 100%

VULVAL ULCERS

Vulval ulceration can be the presenting feature of a wide range of infective, dermatological and neoplastic conditions (see figure). Acute ulceration is more likely to present in the sexual health setting, and herpes simplex infection, syphilis, MPox and tropical STIs need to be excluded. Non-sexually acquired acute genital ulcers (NSAGU), previously known as ulcers of Lipschutz, predominantly occur in young women as a response to infection, so identification and management is included in this guideline.

Figure 1



NON-SEXUALLY ACQUIRED ACUTE GENITAL ULCERS [119-121]

Aetiology

The aetiology of NSAGU is unknown but they have been linked to a variety of bacterial and viral infections including Epstein Barr Virus (EBV), and Cytomegalovirus (CMV) among others and more recently Covid-19 infection [122].

Clinical Features

NSAGU presents with the acute onset of one or more painful ulcers typically affecting the labia minora and majora and usually associated with flu like symptoms. Ulcers are deep with well demarcated borders and a superficial fibrinous coating and may present as “kissing” ulcers. The majority of cases occur in younger women (<20 years of age) who are either pre-coitarche or without a history of recent sexual intercourse. [119-121]

Complications

While most ulcers are self-limiting, superinfection may occur. The ulcers typically do not scar.

Diagnosis

The diagnosis is made on the clinical history and features, after the exclusion of infectious and non-infectious causes of the ulcers. Major diagnostic criteria are the acute onset of one or more painful vulval ulcers and the absence of infection, and supporting criteria are the localisation at the vestibule or labia minora, recent systemic infection and ongoing flu like symptoms, and low sexual risk [123].

Investigation

- Screening to exclude STIs
    - PCR for herpes simplex and syphilis
    - Syphilis serology
    - Screening for gonorrhoea and *Chlamydia trachomatis* if sexually active
    - Consider PCR for Haemophilus ducreyi [120, 124]
- Testing for MPox dependent on clinical history
- Bacterial culture
- Serology for acute EBV, CMV, Mycoplasma pneumoniae, toxoplasmosis, influenza or salmonella infection can be considered [120] but is not recommended as negative results do not preclude the diagnosis and links to additional infections are being proposed [2,D].
- Biopsy is generally non-specific and therefore not recommended

Treatment [120, 121](1,D)

Genital hygiene advice should be given, and treatment is generally supportive.

Recommended treatment

- Topical local anaesthetic
- Non-steroidal anti-inflammatory drugs as required for pain
- Aciclovir 400mg tds x 5/7 while awaiting results of herpes PCR
- Very potent topical corticosteroids e.g. clobetasol proprionate ointment applied bd

Alternative treatment

- Short course systemic steroids could be considered in severe cases

Pregnancy and Breastfeeding

NSAGU is uncommon in sexually active women, but topical steroids and aciclovir are safe to use if required.

Follow up

Weekly follow up is recommended until lesions have resolved [120] (1,D)

Auditable outcome measures

Screening for HSV and syphilis undertaken target 100%

FEMALE GENITAL PAIN/VULVODYNIA

Female genital pain or vulvodynia is complex, and an individual's symptoms rarely fit neatly into a descriptive category. In clinical practice, female genital pain is often broadly divided into:

1. **Provoked vulvodynia (vestibulodynia) (PVD) –** usually characterised as pain at the vestibule on penetration[125]
2. **Unprovoked (spontaneous) vulvodynia.**

This guidance describes the classification and aetiologies of vulvodynia and then goes on to describe the management of vulvodynia, concentrating on these two common clinical presentations.

Prevalence and aetiology

Quantitative research demonstrates that genital pain in women is common, affecting around 25% of all women at some point in their lifetime and around 8% of women at any one time (126).

Current understanding is that vulvodynia is a largely a pathological pain syndrome caused by maladaptive function of the nervous system, leading to a perpetuation of pain after inflammation or a triggering noxious stimulus has resolved. It may be induced by exposure to acute physical and/or psychological precipitating events in an individual who is pre-disposed to produce and maintain abnormal central sensitisation.

In pain theory terms, pathological pain can be associated with structural damage to the nervous system (neuropathic pain) or abnormal function of the nervous system (dysfunctional pain) (127). It is often characterised by pain which is described as burning, stabbing and/or shooting, or by allodynia and hyperalgesia (128).

Genital pain in an individual is likely to be multifactorial. A prior history of vulvovaginal candidiasis (VVC), usually recurrent, is a commonly reported feature and experimental animal studies support this association (129). Luesink et al suggest that recurrent self-reported VVC may represent development of a genital pain syndrome and care should be taken to avoid repeated prescriptions of topical or systemic antifungal medications before ruling out a primary pain condition (130).

Recent theories of vulvodynia suggest association with site-specific inflammatory responses. Falsetta et al [131] have demonstrated that fibroblasts isolated from the vestibule of patients with provoked vulvodynia are sensitive to proinflammatory stimuli and produce copious amounts of proinflammatory mediators (IL-6 and PGE_2). Understanding vulval inflammation and targeting the inflammatory response could lead to treatment advances, especially for patients exhibiting signs of inflammation. Nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB) or other inflammatory components may be suitable therapeutic targets.

Classification of vulvodynia/female genital pain

The terminology was updated in 2015 when a further consensus document was published [125] following a terminology conference involving the ISSVD, the International Society for the Study of Women's Sexual health (ISSWSH) and the International Pelvic Pain Society (IPPS). The

new classification re-defined female genital pain in the light of research into potential causes and associations which led to the understanding that that development and maintenance of genital pain is multifactorial: *'studies have led to the conclusion that vulvodynia is likely not one disease but a constellation of symptoms of several (sometimes overlapping) disease processes, which will benefit best from a range of treatments based on individual presentation'*

The 2015 classification is summarised below:

Vulval pain caused by a specific disorder	Vulvodynia—vulval pain of at least 3 months' duration, without clear identifiable cause, which may have potential **associated factors:**
• Infectious (e.g., recurrent candidiasis, herpes, HPV) • Inflammatory (e.g., lichen sclerosus, lichen planus, immunobullous disorders) • Neoplastic (e.g., Paget disease, squamous cell carcinoma)	• Comorbidities and other pain syndromes (e.g. painful bladder syndrome (133), fibromyalgia, irritable bowel syndrome, temporomandibular disorder/orofacial pain (134) • Genetics e.g. gene polymorphisms (135,136)

• Neurologic (e.g., postherpetic neuralgia, nerve compression, or injury, neuroma) • Trauma (e.g., female genital cutting, obstetrical e.g. pelvic floor descent) • Iatrogenic (e.g., postoperative, chemotherapy, radiation) • Hormonal deficiencies (e.g., genitourinary syndrome of menopause [vulvovaginal atrophy], lactational amenorrhea)	• Hormonal factors (e.g. pharmacologically induced) (137) • Inflammation (129,138) • Musculoskeletal (e.g. pelvic muscle over-activity, myofascial, biomechanical) (139,140) • Neurologic mechanisms • Central (spine, brain) (141) • Peripheral: neuroproliferation (142) • Psychosocial factors (e.g. mood, interpersonal, coping, role, sexual function, childhood sexual abuse) (143-144) • Structural defects (e.g. perineal descent) (145,146)

1

Useful descriptors of vulvodynia as follows, taken from earlier guideline (132]:

- Localisation: localised e.g. vestibulodynia, clitorodynia or generalised or mixed
- Provoked, spontaneous/unprovoked or mixed
- Onset: primary i.e. in provoked vestibulodynia pain starts from coitarche or first tampon use, or secondary: onset of pain after a preceding pain-free period.
- Temporal pattern: e.g. intermittent, persistent, constant, immediate, delayed

It is possible that some of the factors currently listed as associated with vulvodynia may be reclassified by ISSVD as conditions causing vulval pain, if future research proves a definite causative role.

Most importantly, it was recognised that women may have both a specific disorder (e.g. lichen sclerosus) and co-existing vulvodynia. Both need to be considered when managing a patient's symptoms of pain.

Practical management of genital pain in women

For **all** vulval pain presentations, the following elements of management are essential.

History to include:

- Onset, time-course and severity of pain
- Recognised triggers and/or associated factors (see above).
- Spontaneous or provoked?
- History of skin conditions and previous topical treatments (consider contact allergy)
- History of thrush, herpes and other ulceration, HPV infection
- Other related pain conditions
- Hormonal status
- Obstetric and gynaecological history, spinal and pelvic trauma (consider pudendal neuralgia, genitofemoral nerve damage)
- Sphincter dysfunction
- Drug history including hormonal contraception, hormone blockers, diabetic drugs

It is essential to explore the impact of pain on the woman, in particular on activities of daily living, sexual function, intimate relationships, urinary function, sleep and psychological parameters/self-image. Consider using a ratified questionnaire to capture all aspects, such as the Vulvar Pain Assessment Questionnaire inventory (147).

An objective assessment of impact of condition on mood such has the HADS (148) or DLQI (149) can also be helpful as genital pain is highly associated with anxiety and depression. It is important to find out about the patients' main ideas, concerns and expectations.

Genital examination

Depending on the individual presentation, elicitation of touch tenderness, careful speculum examination to assess vaginal walls (use a small speculum), gentle digital/bimanual examination to assess pelvic musculature and organs and musculoskeletal examination may be helpful.

Examination should include assessment of inguinal region for lymphadenopathy and also examination of perineal and peri-anal skin.

Investigations

- Investigations are not required unless excluding other causes of genital pain.

Formulation of a management plan and follow-up arrangements

Patients should be provided with an explanation of the diagnosis with access to written information and patient support groups for example the Vulval pain society (150). Patients can be reassured that a significant proportion will experience significant reductions in pain regardless of treatment (151).

<u>Management</u>

<u>General</u>

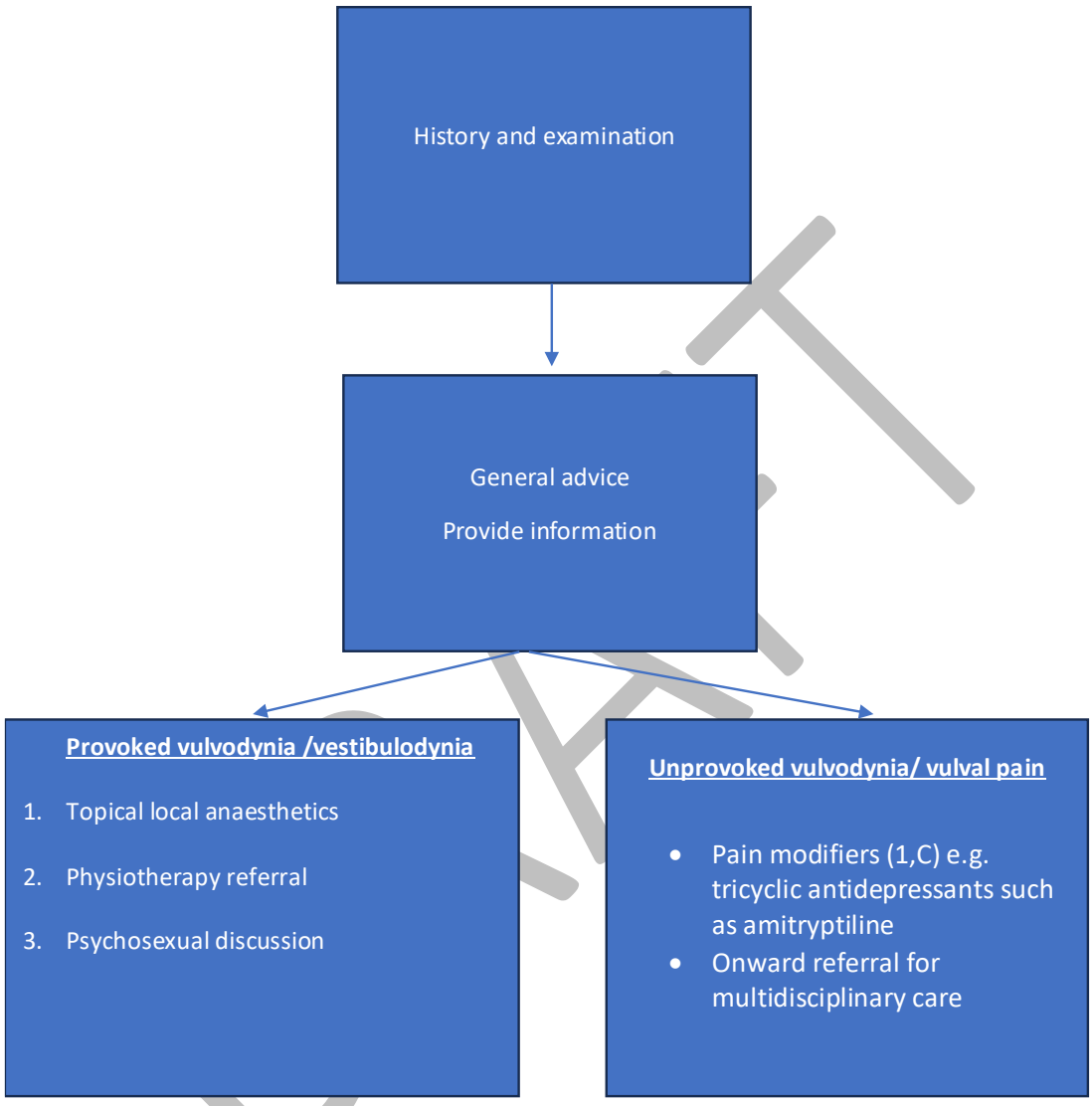
The British Society for the Study of Vulval Disease (BSSVD) recommends a multidisciplinary approach to patient care and that combining treatments can be helpful in dealing with different aspects of vulval pain (152-154)

There seems to be a strong placebo effect associated with treatments for vulval pain, and it is difficult to ascertain effectiveness of particular interventions from the available literature (155).

Patients should be advised to follow a good genital skin care regime, with avoidance of topical irritants/allergens, perfumed sanitary wear, tight clothing, excessive cycling/horse-riding etc. The regime might include use of emollient soap substitute and regular application of a bland emollient throughout the day, especially before and after toilet. A non-perfumed lubricant should be used for sexual intercourse.

Details of management of the two commonly described vulval pain presentations

Suggested initial management in GUM setting



1. Provoked vulvodynia a

Summary of clinical features

Symptoms

Vulval pain frequently felt at the introitus on penetration during sexual intercourse, on insertion of tampons or with speculum examination. The pain is often described as tearing in nature and may persist after sexual intercourse/tampon use. There is usually a long history.

Signs

Focal tenderness elicited by gentle application of a cotton wool tip bud e.g. at the introitus or around the clitoris – 'touch tenderness'. Normal vestibular erythema may be seen and there are no signs of an acute inflammatory process. Non-specific mild erythema may be seen in some patients, especially at vestibular gland entrance, and is not usually significant.

Diagnosis

Clinical diagnosis is made on history and examination.

Management

Specific treatments

Topical local anaesthetics, e.g. 5% lidocaine ointment or 1-2% lidocaine gel used daily may be helpful [1,D], but warn the patient about possible irritation. For dyspareunia, the application should be made 15–20 min prior to sex and washed off just before. The use of a condom by the partner can reduce the risk of penile numbness. Oral contact should be avoided. However topical anaesthetic agents are not helpful in all women and in a small randomised double-blind, placebo-controlled trial, lidocaine did not perform any better than placebo (156).

Ideally all women should be referred to a specialist women's health physiotherapist to assess pelvic floor musculature, but this resource is often not available. Women with hypertonic pelvic floor dysfunction, trigger points or vaginismus should be advised against over-strengthening of the pelvis floor. Gentle yoga, stretching and genital self-massage may be helpful and empowering (157).

Psychosexual discussion and/or counselling may be useful [153] (1,D). In many cases this could include an exploration of the broader definition of sexual intimacy to include non-penetrative sex and non-genital erogenous zones, empowering both men and women to create mutually rewarding sexual experiences, with enhanced communication and reduction in shame and anxiety.

Pelvic floor muscle biofeedback [157] (1,C)

Vaginal transcutaneous electrical nerve stimulation

Vaginal trainers (1,C) [158]

Botulinum toxin (especially if associated with vaginismus (2,C) [159]

Cognitive behaviour therapy (2,C) (160)

<u>Alternative regimens</u>

Pain modifiers – the benefit of drugs such as tricyclic antidepressants (TCA), gabapentin and pregabalin for provoked pain is not clear. Amitriptyline gradually titrated from 10 mg up to 75 mg according to response and side effects may be beneficial in some women (2,D). However, a small placebo-controlled randomised controlled trial found that another TCA, desipramine, either alone or in combination with topical lidocaine, performed no better than placebo for this condition (156).

Surgery – modified vestibulectomy may exceptionally be considered in cases where other measures have been unsuccessful. Patients who have responded to topical lidocaine prior to sex have a better outcome. Studies have short follow up times so further data about long term response is required (2,D) [161, 162]

<u>Follow-up</u>

As clinically required.

Long-term follow-up and psychological support may be needed.

<u>Auditable outcomes</u>

Patients should be given a full explanation of their condition with written or web-based information Target 100%

An assessment should be made of the impact of the condition Target 100%

2. Unprovoked vulvodynia

Aetiology

The aetiology is unknown and the condition is best managed as a chronic pain syndrome.

Clinical features

Symptoms

Pain that is longstanding and unexplained.

May be associated with urinary symptoms such as interstitial cystitis (163)

Can also be associated with irritable bowel syndrome and fibromyalgia.

Signs

The vulva appears normal.

Complications

- Sexual dysfunction
- Psychological morbidity.

Diagnosis

Clinical diagnosis is made on history and examination, having excluded other causes of vulval pain.

Further investigation

After exclusion of other treatable causes, no further investigation is required.

Biopsy should be performed if any suspicion of an alternative diagnosis.

Management

Specific treatments

Pain modifiers (1,C) – tricyclic antidepressants are well established in chronic pain management. Few studies have specifically examined the effect in vulvodynia; however, amitriptyline is frequently first-line treatment; dosage should be increased by small increments starting at 10 mg up to 100 mg daily according to the patient's response (164). Other options are Desipramine (with or without topical anaesthetic agents) [156] and Imipramine which may have fewer side effects. Duloxetine is also an option. However, of note, a recent randomised meta-analysis has not confirmed the beneficial effect of amitriptyline [165]

If unresponsive or unable to tolerate the side effects, gabapentin (166) (2,C) or pregabalin (167) may be used (2,D) but have addictive potential.

Alternative/combination regimens

- Topical local anaesthetic, e.g. 5% lidocaine ointment or 1-2% lidocaine gel. A trial of local anaesthetic may be considered and requires regular application a few times

through the day. However, local irritation is a common side effect, and small studies suggest lack of effectiveness for most women. There is also a risk of systemic absorption with frequent application to large areas. [156] (2,D).

- Transcutaneous nerve stimulation [168] (2,C)
- Cognitive behavioural therapy and psychotherapy [169] (2,C).
- Acupuncture [170] (2,C).
- Physiotherapy if evidence of a weak pelvic floor.
- Botulinum toxin injections [159], (2,C)

Treatment-resistant unprovoked vulvodynia may require referral to a pain clinic.

Follow-up

As clinically required.

Auditable outcomes

Patients should be given a full explanation of their condition with written or web-based information Target 100%

1 Summary of management recommendations

Condition	Management	Alternative management	Referral / ongoing management
Lichen sclerosus	Clobetasol proprionate ointment od x 1/12, alternate days for 1/12 then twice weekly for 1/12	Mometasone furoate (same regimen)	Refer to vulval clinic for persistent disease and consideration of other therapies
Lichen planus	Vulval: Clobetasol proprionate ointment od x 1/12, alternate days for 1/12 the twice weekly for 1/12 Vaginal: Vaginal treatment with clobetasol proprionate on a dilator, or prednisolone suppositories	Topical calcineurin inhibitors (managed with dermatology)	Refer to vulval clinic for persistent disease, erosive LP/VVGand consideration of other therapies
Vulval eczema Atopic eczema Contact dermatitis (irritant and allergic) Seborrheic eczema Lichen simplex	Emollients and soap substitutes Mild to moderate topical steroid preparations applied once daily	Potent / very potent steroid if significant inflammation or lichenification e.g. clobetasol proprionate ointment od Sedating Antihistamine if severe itch	Refer on to dermatology if patch tests required or very severe allergic contact dermatitis
Psoriasis	Weak to moderately potent topical steroids	Vitamin D analogues Weak coal tar preparations	Refer on to Dermatology for unresponsive, recalcitrant cases, consideration of topical calcineurin

			inhibitors or systemic therapies
HSIL	Local excision	Imiquimod cream (this may be first line for multifocal disease)	All cases should be referred to specialist multidisciplinary vulval clinic or gynaecological oncologists
dVIN	Referral for excision	As advised by multidisciplinary team	All cases should be referred to specialist multidisciplinary vulval clinic or gynaecological oncologists
NSAGU (Ulcer of Lipschutz)	• Topical local anaesthetic • Non-steroidal anti-inflammatory drugs as required for pain • Aciclovir 400mg tds x 5/7 while awaiting results of herpes PCR • Clobetasol proprionate ointment applied once daily	Systemic steroids	Refer to dermatology or gynae (as per local expertise) if systemic steroids considered
Provoked vulvodynia	5% lidocaine ointment or2% lidocaine gel used daily	Pelvic floor assessment with physiotherapist	Referral to vulval clinic or psychosexual services as per local expertise for further assessment / management
Unprovoked vulvodynia	Pain modifiers - tricyclic antidepressants e.g. amitriptyline starting at 10mg	Topical local anaesthetic, e.g. 5% lidocaine ointment or 2% lidocaine gel	Refer for vulval clinic support May need pain clinic referral

		Duloxetine, pregabalin or gabapentin	

1

2

3 **Acknowledgments**

4

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