Skin diseases affecting the vulva

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Abstract

Vulval skin disease is common in gynaecological practice. This review aims to enhance clinical skills in patient assessment, vulval examination and treatment of common benign vulval skin disease. Basic treatments are often of benefit the patient (e.g. use of emollients and topical steroids), but many patients have complex disease and can present with more than one condition so careful assessment and individualised management is essential. Understanding of when to refer onwards to a vulval specialist service is important to optimize clinical outcomes. Clinical outcomes to consider for all patients with vulval skin disease should include: (i) a reduction in symptoms (e.g. less itch, fewer flare-ups); (ii) an improvement in function (e.g. sexual function, mobility); (iii) increased confidence in self-management (e.g. management of flare-ups and self-examination).

Keywords lichen planus; lichen sclerosus; lichen simplex; psoriasis; vulva; vulval eczema (dermatitis); vulvovaginal candidiasis

Assessment of the patient

History taking

Most vulval skin diseases can be diagnosed on the basis of a history and clinical examination. Investing time in this process is important as some patients have already experienced delays in management or ineffective treatments. Discussing vulval skin problems is a sensitive subject matter which requires a relaxed and sympathetic environment for the patient to express their concerns. This should be recognized by the clinician and will improve the overall patient experience by allowing a good rapport to be established early on.

An accurate description of symptoms and assessment of function are paramount to determine the impact of the condition on the patient. Table 1 outlines some key questions to ask in the history and reasoning for this. A psychosexual history should be explored if appropriate as secondary psychosexual problems such as avoidance, phobia of touch, loss of libido and vaginismus may be identified and need addressing as a key aspect of the treatment plan. Clinicians may express concern at discussing sexual function with patients who have a vulval problem, but patients often welcome discussing this important aspect of the history.

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Vulval examination

Vulval examination needs to be carried out with tact and awareness of the patient's possible discomfort. It is sensible to have a chaperone present, especially if the examining doctor is male. Examination should be thorough and methodical to include all areas of the vulva, perineum and perianal area. The patient should initially be in the dorsal position for vulval and perineal examination and subsequently turned to the left lateral position to examine the perianal area. Good lighting is essential to view these areas adequately. It is not necessary for the patient to be placed in the lithotomy position.

The normal vulva in an adult woman includes the mons pubis, inguinal folds, outer and inner labia (majora and minora), clitoris (body and hood), perineum, vestibule and anus (Figure 1). Hart's line is the junction between the vestibule and the inner labia and marks change in epithelium type from mucosal type to stratified squamous. Digital and speculum examinations of the vagina may be appropriate to look for erosions, mucosal thickening, adhesions, and scarring.[1] Vulval pathology may be a manifestation of a general skin condition and therefore a complete examination including the umbilicus, natal cleft, oral cavity, eyes and mouth should be performed if relevant. This allows a more complete assessment of disease extent and diagnosis especially for diseases that are not solely restricted to the vulval region such as psoriasis, eczema, lichen sclerosus and erosive lichen planus. It is important to note that the classical appearances of skin conditions may not apply to the vulval area as it is a covered, moist environment. For example, psoriasis on normal skin presents with well demarcated, scaly erythematous plaques, but vulval psoriatic plaques are smooth, glossy and often salmon-pink in colour often with no scale.

Examination may show changes in colour and texture of vulval skin or mucosa:

- '*Erythema*' refers to reddening of the skin, which may be poorly demarcated, as in eczema (Figure 2 demonstrates poorly defined erythema in the context of contact dermatitis) or well demarcated, as in psoriasis (Figure 3). The presence of erythema usually indicates an underlying inflammatory process. If present in association with pain, infection should be considered.
- *Whitening* of the skin may occur in the presence of a normal epidermis such as in vitiligo, or in conjunction with epidermal change such as lichen sclerosus (Figure 4).
- '*Lichenification*' is the term used to describe a leathery thickening of the skin with increased skin markings which occurs in response to persistent rubbing. The vulval region is often moist and scale is a less reliable sign than on other areas of the skin. It is most reliable on the mons pubis where scale may be a manifestation of psoriasis. On other sites such as the natal cleft, scale and lichenification may result in whiteness and splitting of the skin. This can make common conditions more difficult to diagnose (Figure 5).

The terms used to describe vulval lesions are described in Table 2.

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Vulval history-taking points

Question	Reasoning
What are the key symptoms and how severe are they?	Important to be clear on the initial symptom. Itch can suggest skin disease or infection. Pain can be secondary to itching from skin damage through trauma. Vaginal discharge may suggest infection.
How long has the woman been experiencing symptoms?	Acute symptoms may indicate infections such vulvovaginal thrush or contact dermatitis. Chronic symptoms may be due to lichen sclerosus or lichen planus.
What is the impact on the patient's function? ('How do the symptoms affect you?' or 'What do you miss as a result of the problem?')	Improvement in function (including sex) is an important clinical outcome. Functional impairment should be documented at every consultation.
What treatments have been tried before (including over the counter agents)?	The history should explore failed treatments e.g. topical steroid frequency and amount as under usage with these treatments is common due to steroid phobia or a lack of understanding by the patient. Inappropriate topical treatments can exacerbate symptoms and potentially cause an irritant reaction.
How is the patient cleaning the vulval area?	Over-washing may lead to skin damage and further irritation.
Are there any possible contacts with irritants e.g. soaps, shampoos, urine, and scented vaginal wipes?	These are potential irritants and can damage the skin potentially causing inflammation. Urine and scented vaginal wipes are potent skin irritants.
Are symptoms stress related?	In lichen simplex, itching is classically worse at times of stress. Many inflammatory skin conditions may flare during stressful life events.
Is there any systemic illness?	For example, diabetes, renal failure, anaemia (these may all be a cause of itch), or autoimmune conditions (higher chance of systemic autoimmunity in lichen sclerosus or erosive lichen planus). A family history of autoimmunity should also be asked.
Are there any other skin conditions present?	Skin disease at other skin sites may provide clues to the vulval diagnosis. For example, eczema or psoriasis. These may be very obvious, however signs may be subtle, for example psoriasis is sometimes hidden as cracking behind the ears, a scaly scalp or umbilical erythema).

Table 1 (*continued*)

Table 1

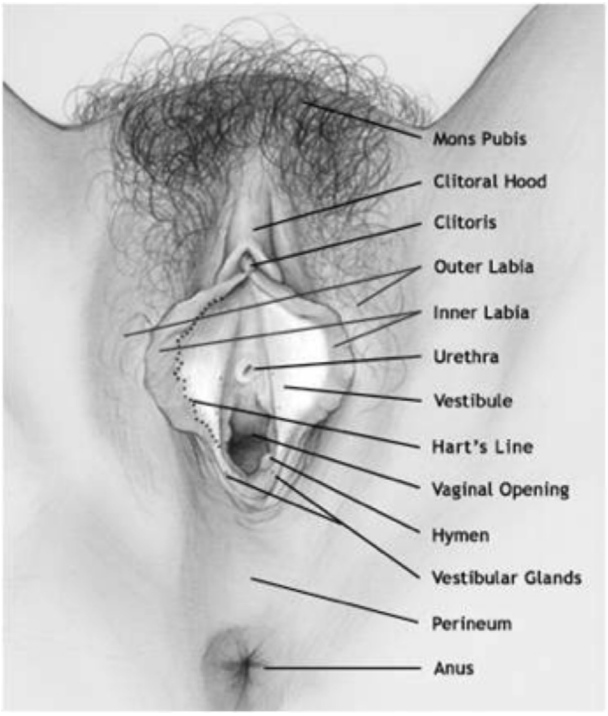

Figure 1 Schematic representation of the normal adult vulva. Copyright "Dawn Danby and Paul Waggoner", c/o ISSVD.

Investigations

Diagnostic vulval biopsy

A 4 mm Keyes punch biopsy is adequate and should ideally be carried out under local anaesthetic at the initial visit if indicated. It can provide adequate tissue for histology but is not adequate if immunofluorescence is also required to exclude immunobullous disease when two biopsies may be needed. It is important to avoid crushing the epithelium when taking the biopsy as this may impact on histology interpretation. Inflammatory vulval lesions often have indistinct inflammatory pathology and a diagnosis should always be a clinic pathological correlation. A vulval biopsy is usually indicated for (1), asymmetrical pigmented lesions, (2) persistently eroded areas, (3) indurated and suspicious ulcerated areas, (4) when there is poor response to treatment following the initial diagnosis. The site selected for biopsy should be tissue-representative of the lesion or area of abnormality. This is usually

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