Vulval pruritus and vaginal discharge

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Abstract

Vulval pruritus (itching of the vulva) and vaginal discharge are common complaints that many women will experience at least once in their lifetime. Patients will usually attend their usual doctor or general practitioner with these symptoms, but they are also often encountered in secondary care. An accurate diagnosis relies on a thorough history and examination. A vulval biopsy may be useful where there is any diagnostic uncertainty. Vaginal and endocervical swabs should be taken in cases of vaginal discharge. Causes of vulval pruritus and vaginal discharge fall broadly into the same general categories: infection, dermatoses, Vulval Intraepithelial Neoplasia (VIN) and malignancy. Appropriate investigations and treatments are discussed.

Keywords candidiasis; lichen sclerosus; sexually-transmitted infections; vaginal discharge; vulval pruritus

Vulval pruritus

Vulval pruritus is a common complaint among patients attending a general gynaecology clinic. Patients may have already experienced a prolonged course of misdiagnosis or inappropriate management. Therefore, one must adopt a thorough, detailed and empathetic assessment of the patient, including a careful and systematic examination of general skin surfaces including the vulva. Differential diagnoses are outlined in Table 1.

Assessment of the patient with vulval pruritus

History: a comprehensive and precise account of symptoms should be sought from the patient. This includes the specific symptoms (e.g. itching/heat/pain/irritation), duration of symptoms, associated complaints (for example, vaginal discharge) and previous treatments (prescriptions and self-medications). Look for possible irritants to the vulva, for example soaps, talc or sanitary protection. Symptoms at other skin sites and symptoms of systematic illness should be sought, and a detailed past medical and surgical history taken. A general gynaecological history, including smear history, should be taken. Drug history and family history are important. Specifically, ask about a personal or family history of autoimmune diseases or atopy (eczema, hay fever, asthma). Common autoimmune conditions found in women with lichen sclerosus include disorders of thyroid function, pernicious anaemia and type 1 diabetes. In addition, ask about urinary or faecal incontinence. Urine and faeces are highly irritant to the vulva. The history should include a sensitive enquiry regarding sexual function. Such issues may be very upsetting and patients may find it difficult to discuss them freely.

Examination: examination of the vulva should be systematic and include all anatomical structures within the vulva, as well as the posterior aspect of the perineum. Specifically, the examination should include the mons pubis, labia minora, labia majora, clitoris, vestibule, perianal area and the genito-crural folds. A brief examination of all the skin surfaces of the body may yield clues to specific skin conditions, for example the mouth and nails may also be involved in lichen planus. The following points may be considered when undertaking examination of the vulva:

- Use adequate lightning
- Explore all areas of vulval anatomy as specified above
- Look carefully for abnormal anatomy, for example atrophy, fissuring, fusion
- Ask the patient to point to areas where they have symptoms
- Look for changes in pigmentation (loss of pigmentation may be found in lichen sclerosis and VIN and hyperpigmentation is found in areas of inflammation)
- Look for ulcers on the vulva
- Consider examining the vagina and cervix where possible, particularly where VIN is suspected.

A detailed description of your findings, including a clearly labelled diagram if possible, should be documented.

Vulval biopsies and other investigations: a vulval biopsy may be considered if there is any doubt about the diagnosis, for refractory disease, for pigmented or indurated areas or where VIN or cancer is otherwise suspected (Table 2). The edge of the abnormal area or ulcer should be sampled. A punch biopsy under local anaesthesia in the clinic setting should be performed wherever possible.

Treatment of conditions causing vulval pruritus – general principles

A diagnosis should ideally be made before treatment is commenced. Patients can be advised to avoid using scented products or any other irritants on the vulval area. Water alone should suffice for vulval hygiene, or aqueous cream may be used as a soap substitute if required. Emollients are safe, can be used liberally, and may reduce the need for corticosteroid treatment. These two measures alone can help to provide long-term symptomatic relief. Patients may also be advised to wear loose, cotton underwear instead of synthetic alternatives (Table 3).

Topical corticosteroids are often prescribed for conditions that cause vulval pruritus. Steroid ointments are normally prescribed in preference to creams. Any prescription for topical corticosteroids should be accompanied by written patient information. Patients are generally advised to apply a 'finger-tip' amount of ointment to affected areas on the vulva. This is equivalent to the

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Causes of pruritus vulvae

Diagnosis	History	Examination	Investigations	Treatment
Vulvovaginal candidiasis	Vulval itching, burning and soreness. Curd-like vaginal discharge	Dry, red vulva Curd-like vaginal discharge	High vaginal swab (culture)	Anti-fungals — oral/ vaginal and topical
Fungal infection (*Tinea cruris*)	Itching of vulva and genito-crural folds. Feet may be affected	Erythema with scaling	Microscopy of skin scrapings	Topical anti-fungals
Lichen sclerosus	Persistent vulval itching/ asymptomatic	White plaques or papules, changes in pigmentation, destruction of normal vulval architecture, fusion of labia, fissuring	Vulval biopsy (not always necessary)	Highly potent topical steroid ointment (Dermovate®) — reducing regimen over 3 months
Lichen planus	Severe chronic vulval itching/asymptomatic	Varies — shiny pink/red papules, desquamation May affect the vagina and cervix	Vulval biopsy (histological findings not consistent but may exclude other diagnoses)	As for lichen sclerosus
Contact irritant dermatitis and allergic dermatitis	Acute or chronic itching with recognizable trigger	Erythema, oedema, superficial ulceration and fissuring due to scratching	Clinical diagnosis Exclude secondary infection (Patch testing)	Avoidance of trigger, emollients (topical steroid)
Vulval intraepithelial neoplasia	Chronic itching, soreness or burning/asymptomatic	Induration of skin/ discreet lesions/changes in pigmentation	Vulval biopsy	Conservative/laser ablation/surgical excision
Psoriasis	Chronic itching and soreness, other skin sites may be affected	Smooth erythematous area with scaling and well-defined edges — often affects flexures/ scalp	Vulval biopsy (not always necessary)	Avoid any triggers Topical steroids (short course) Refer to dermatologist
Eczema	Chronic itching and soreness, other skin sites may be affected, atopy	Erythema and excoriation marks	Clinical diagnosis	Topical steroids Emollients
Lichen simplex chronicus	Long history of vulval itching	Skin excoriation, oedema, pallor and lichenification	Vulval biopsy Check iron status	Avoid scratching Antihistamines Topical steroids Reassurance

Table 1

amount of ointment dispensed from the very tip of the index finger to the first crease on the index finger.

As a general rule, patients who do not respond to targeted treatment should be referred to a specialist vulval clinic.

Specific causes of vulval pruritus

Infective causes (candida/fungal): patients with vulvovaginal candidiasis typically complain of itching, burning or soreness on the vulva and characteristic features are of dryness, erythema and swelling of the vulval skin. Superficial fissuring and ulceration, due to scratching, might also be seen. A curd-like white vaginal discharge may be present and this will be seen on examination with a Cusco's speculum. Culture of a high vaginal swab will usually confirm the presence of a yeast organism, the most common of which is *Candida albicans*, a normal commensal of the gut and vagina. *Candida glabrata* or *Candida tropicalis* are found in a small proportion of patients, and these organisms may be resistant to the commonly used anti-fungals. A course of broad-spectrum antibiotics may lead to an acute episode of vulvovaginal candidiasis, which is also associated

When to perform a vulval biopsy

Persistent itching
Persistent ulceration
Persistent erosions
} Despite treatment

Induration
Pigmented lesions
Suspicious areas

Table 2