Gynaecology in General Practice

Pruritus Vulvae

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Anogenital irritation is a fairly common complaint by women in a general practitioner's surgery. No age group is exempt, if nappy rash is included, but strictly speaking pruritus is itching or irritation rather than soreness. In this region pruritus is a particularly distressing complaint because to attempt to relieve it by scratching is socially unacceptable. For this reason, parents may consult the doctor about young girls who have been doing so.

Causes

THREADWORMS

By far the commonest cause in young girls is infestation with thread worms (*Oxyuris vermicularis*). In small girls thread worms, which emerge from the anus particularly at night, may "get lost" and wander into the vulva, even hiding in the skin folds around the clitoris. The diagnosis may be made by the pathologist by examining a Cellophane swab, but perhaps it is best made by a careful inspection. It may be difficult for a doctor to do this, and instruction should be given to an intelligent parent in how and where to look, particularly if the child wakes up complaining of irritation. For this to be a success, the anal verge and vulval lips must be gently drawn apart in a good light. The treatment with piperazine tends to be unrewarding as reinfection is common. Often treatment of a whole family is advocated, with a repeat after a fortnight, but the source of reinfection is likely to be the school.

DISCHARGE

In adults irritation may or may not be associated with discharge. If so (though there may be secondary vulvitis) the cause lies in the vagina. Even a simple erosion or benign mucous polypus producing a clear mucoid leucorrhoea can cause irritation. If the cervix is infected the discharge will be mucopurulent. Under these circumstances the possibility of a specific infection such as gonorrhoea has to be remembered. Pure pus may come from a pyometra, an infected carcinoma of the cervix, or from an acute vaginal infection such as that due to *Trichomonas vaginalis*. In the latter instance soreness is likely to be more prominent than irritation, but in a more chronic phase the reverse is likely to be true.

The discharge most commonly associated with irritation is that due to monilia or "thrush." The appearance of an overt

infection is the well-known "curd" formation, but in many instances the appearance is not typical. Monilia can only be treated by topical mycostatic agents. Preparations by mouth are not absorbed and are used only for alimentary infections, which may, however, provide a reservoir for anogenital infection. Monilial infection is particularly associated with pregnancy, diabetes mellitus, the contraceptive pill, antibiotic therapy, and debilitating illness. In both trichomonal and monilial infections treatment of the sexual partner may be indicated. Condylomata acuminata may be associated with either of these infections.

OTHER FACTORS

In the absence of discharge pruritus vulvae is likely to have a local cause. It is comparatively rare to find no local skin changes in patients who complain of this symptom. Sometimes the changes of simple lichenification predominate and may be secondary to scratching. There may also be evidence of psychoneurosis, but the relationship of the neurosis is debatable because pruritus could well be the cause rather than the effect.

General disorders may present with anogenital irritation, and of these the most important is diabetes mellitus. Testing the urine from all such patients should be mandatory. Similarly general skin diseases can sometimes present with this symptom—in particular, eczema, lichen planus, and psoriasis. Psoriasis of the vulva may be salmon pink and shiny, so that the diagnosis may be missed if other parts of the body are not inspected. Allergy can arise in the vulva from clothing or washing powder, and the abnormal skin appearances can be due to self-medication with chloroxylenol or other antiseptics. Though haemorrhoids may be blamed for pruritus ani, pruritus vulvae should not readily be ascribed to genital prolapse.

"CHRONIC EPITHELIAL DYSTROPHY"

In older patients, particularly, the cause is likely to be situated in the vulva itself. Most skin conditions of the vulva can produce pruritus and one view is that the distinction between many of them is artificial so that the term "chronic epithelial dystrophy" has been suggested. Many people, however, have found this destructive argument not very convincing and the histological classification of the epithelial dystrophies is still the basis of the modern view.

"LEUKOPLAKIA"

Confusion has always been associated with the word "leukoplakia." As a clinical description of a visual appearance

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it may be of value in relation to the lip or the mouth, but it is virtually useless when applied to the vulva. The term is best reserved for a distinct histological appearance characterized by chronic inflammation of the dermis, with increased collagen deposition and, in the epithelium, "unrest" of the cells of the epidermis. In particular, the basal layer shows hyperactivity with distortion and spiking of the rete pegs. Defined this way, leukoplakia may well have a premalignant status, and may complicate other epithelial dystrophies of the vulva.

It is important to realize that pruritus is a very constant symptom when leukoplakic change has supervened and that leukoplakia may occur even in the simple lichenification due to scratching. By the same token, all that is white on the vulva is not necessarily leukoplakia. Perhaps the commonest differential diagnosis is lichen sclerosis vel atrophicus, a disease largely but not exclusively confined to the anogenital region. The histological changes of leukoplakia rarely occur outside the middle of the labia majora and never encroach the vestibule. Sometimes the skin over the perineal body (perineum) and perianal region may be involved. By contrast, lichen sclerosis commonly crosses the labiocrural folds and extends to the natal cleft. The disease begins as a perifollicular hyperkeratosis, and the small white patches may coalesce to give an appearance which in the past has been called atrophic leukoplakia. True leukoplakia may complicate lichen sclerosis.

Primary atrophy of the vulva is not necessarily postmenopausal. Gynaecologists use the term kraurosis to describe the navicular appearance of the atrophied vulva with flattened labia majora and virtual disappearance of the labia minora. The skin is shiny and fragile so that dyspareunia and soreness are more likely to be the presenting symptoms than pruritus. Histological leukoplakia may complicate this condition and should be suspected if pruritus is particularly prominent.

EPITHELIOMA OF THE VULVA

Pruritus vulvae is a common first symptom of epithelioma of the vulva. Though this tumour should present early because of its superficial nature, "patient delay" is worse in this form of genital cancer than almost any other. Unfortunately "doctor delay" is also extremely common; he may fail to examine at all, to inspect the anterior part of the vulva in the left lateral position, and to recognize an atypical lesion. An atypical lesion may complicate frank carcinoma-in-situ of the vulva, known as Bowen's disease. This change can transgress the boundaries commonly recognized by leukoplakia and may masquerade as an unpleasant vulvitis. An important differential diagnosis is extra mammary Paget's disease. When this eczematous condition has been diagnosed, a search should be made for underlying carcinoma.

Diagnosis and Treatment

For epithelial dystrophy, leukoplakia, and epithelioma of the vulva, biopsy is the key to diagnosis, and for discrete lesions excision biopsy is called for. Local vulvectomy is required for preinvasive lesions and many cases of established leukoplakia.

This operation is not recommended for lichen sclerosis, unless complicated by leukoplakia. Radical vulvectomy remains the treatment of choice for invasive disease, but the extent of the skin removal is now modified so that the operation is less mutilating. Even after local vulvectomy patients should be followed up as disease, sometimes frankly invasive, can occur in the scar or adjacent skin.

LOCAL VULVAL INFECTIONS

Finally, infections of the vulva alone may present as pruritus. The pubic louse, *Phthirus pubis*, may be found on inspection particularly if nits are looked for. Monilia may affect the vulva without involving the vagina, and the diagnosis is not as easy as in the vaginal form. Culture on Sabouraud's medium may be necessary. Moniliasis and tinea infections must be distinguished as the treatment is quite different. For the latter, prolonged treatment with oral griseofulvin may be indicated, but this is totally useless in candidal infections.

Tinea cruris may be recognized clinically in florid cases, but in others the diagnosis may be difficult. The concurrence of tinea pedis may be suggestive that the vulval lesion may be due to tinea cruris. Examination with Wood's Light in a darkened room can be helpful. This examination may also give the diagnosis in erythrasma, a bacterial infection, by producing a salmon pink fluorescence. The treatment is erythromycin by mouth.

Conclusion

Pruritus vulvae is a symptom which can be associated with a variety of conditions, some of which are of fundamental importance. The most obvious corollary of this is that the patient must always be examined. Examination should include inspection in the dorsal position, passage of a vaginal speculum and, of course, urine analysis. Examination of a wet preparation, if there is discharge, may demonstrate trichomonas. A cervical smear is a very accurate method of detecting trichomonas and may diagnose monilia even when bacteriological facilities are not available. Without these facilities, treatment of irritating discharge based on examination of the clinical features is quite justified, provided always that the possibility of mixed infections, including venereal disease, are remembered, particularly if response is not complete and prompt.

On the other hand, blind treatment of anogenital irritation by topical steroids cannot be defended. Such steroids may be very helpful in certain of the inflammatory conditions, but can aggravate or actively promote infections. Moreover, the combination with neomycin can be responsible for a drug-sensitivity reaction. The differential diagnosis is so important that nearly all obvious changes in the vulval skin should be subjected to biopsy and histological examination. This inevitably means referral for specialist opinion, and the practitioner who knows his specialist colleagues may select a dermatologist or gynaecologist at will. What is important is interest, and moreover, continued interest, because any patient with pruritus vulvae and an abnormal skin appearance requires not just examination but repeated examination indefinitely.