ABC of Sexually Transmitted Diseases

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GENITAL ULCERATION

Genital ulceration (or erosion) is a common symptom in both sexes and is often due to a sexually transmitted agent. Particular points that need to be elicited from the patient to aid diagnosis are the number of ulcers, the time they have been present, the degree of discomfort they cause and the relation of their appearance to sexual intercourse, trauma, and lesions elsewhere. Most ulcers or erosions are either multiple and painful or solitary and painless.

Multiple painful ulcers

Primary herpes.

Multiple ulcers, particularly if painful, are at present most commonly due to an infection with herpes simplex virus. If this is the patient's first attack the ulcers occur within one to two weeks of exposure to infection. The patient feels ill and the inguinal lymph nodes are enlarged, discrete, and usually painful. A recurrent attack is unlikely to bear any relation to sexual intercourse; it is sometimes preceded by prodromal symptoms and the patient often volunteers the diagnosis. Herpes zoster rarely gives rise to genital ulceration. (Full details of the clinical presentation and management of genital herpes will appear in next week's article.)

Other causes of painful multiple ulcers are Behçet's disease and, rarely in the United Kingdom, chancroid caused by *Haemophilus ducreyi*. Behçet's disease is usually associated with oral ulcers and chancroid is invariably contracted abroad or from a sexual partner who has recently returned from abroad. Chancroid has an extremely short incubation period of two to five days. Scabies may also rarely present as multiple, itching, painful, secondarily infected ulcerated papules produced by scratching.

Patients with non-gonococcal, gonococcal, trichomonal, and candidal infections may have multiple painful erosive lesions on the penis and vulva, sometimes with fissuring. Balanitis and vulvitis may also be found in infections with β haemolytic streptococci and Vincent's organisms. Similar lesions may occur as part of the Stevens-Johnson or Reiter's syndrome, or be due to erythema multiforme, dermatitis, psoriasis and lichen planus, impetigo, furuncles, folliculitis, and drug eruptions.

Herpes genitalis
Herpes zoster
Behçet's syndrome
Chancroid
Balanitis / vulvitis
Erythema multiforme
Stevens- Johnson syndrome

Solitary painless ulcers

Primary syphilis.

Circinate balanitis.

Lymphogranuloma venereum.

The commonest cause of painless genital ulceration is primary syphilis. The incubation period is usually 21 days but the lesions may appear from nine to 90 days after sexual intercourse with an infected partner. Inguinal lymph nodes are moderately enlarged, painless, and discrete. Other stages of syphilis may also result in genital ulceration. Ulcers of the secondary stage, evident as eroded papules or mucous patches, will be multiple but painless, whereas a gumma is usually solitary, painless, and a tertiary manifestation. Other causes of solitary painless ulcers are carcinoma, circinate balanitis, balanitis xerotica obliterans, lymphogranuloma venereum, and granuloma inguinale. Self inflicted trauma or dermatitis artefacta may give rise to large solitary ulcerated areas which are surprisingly painless. More traumatic lesions of the penis, anus, and rectum usually result from sadomasochistic practices, particularly among homosexuals.

Diagnosis

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The two commonest causes of genital ulceration in the United Kingdom are herpes and syphilis. These often look different on macroscopic examination, but the naked eye should not be relied on to differentiate between them or confirm the diagnosis. Herpes is diagnosed by culture of the virus. To exclude primary or secondary syphilis three separate specimens of serum from the ulcer(s) should be examined by dark ground microscopy initially and on three consecutive days. Serological tests for syphilis are not always positive when primary syphilitic lesions are present; the tests do not become positive for about three to four weeks after infection, whereas a primary lesion or chancre may be evident as soon as nine to ten days after exposure.

If the ulceration is due to circinate balanitis, scabies, or Behçet's syndrome, other extragenital lesions may usually be found. The three tropical conditions of chancroid, lymphogranuloma venereum, and granuloma inguinale require special culture facilities. In addition to investigating the cause of the presenting symptom of genital ulceration, tests must be carried out to exclude other concurrent sexually transmitted diseases contracted at the same time and to determine the underlying cause of the ulcers or erosions.