

## GENITAL ULCER DISEASE IN ILORIN, NIGERIA

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*This is a review of 32 consecutive cases of patients with genital ulcers or who were repeatedly reactive to serological tests for syphilis (STS) at the Venereology Clinic of the University Teaching Hospital, Ilorin, Nigeria, between January 1993 and April 1995. The criteria for diagnosis of the various conditions included the history, clinical presentation and the results of laboratory investigations. The commonest cause of genital ulcers was chancroid, accounting for 6(18.7%) of the 32 cases. Other common causes were lymphogranuloma venereum (LGV), genital herpes and primary syphilis, each accounting for 12.5 percent of the cases. An unusual presentation of oro-genital aphthosis, with hyperkeratosis and paraesthesia of a localized area on the palm, in addition to the usual genital and oral lesions was reported. Also reported were cases of perigenital cutaneous onchocerciasis and a case of leprosy presenting as chronic biological false positive (BFP) to STS. Patients with chancroid responded favourably to treatment with ceftriaxone (Rocephin) and so was the hyperkeratosis of oro-genital aphthosis to topical treatment with flumethasone pivalate/salicylic acid ointment (Locasalen). The importance of histological technique for making the diagnosis of some tropical conditions affecting the genitals was highlighted, and the exercise of caution in interpreting the results of STS was advocated.*

### INTRODUCTION

There have been various reports on the prevalence of the various sexually transmitted diseases (STDs) from different centres in Nigeria (1, 2, 3). With the setting up of new University Teaching Hospital (UTH) with a Venereology Clinic at Ilorin, Nigeria, a lot of attention was initially devoted to Public Health Education Programmes on STDs on the local radio and television channels. This made it easy for people to seek medical attention for these conditions. The report of our preliminary experience has been published elsewhere (4). The present communication is on the aetiology, clinical manifestations and management of genital ulcer disease at the University of Ilorin Teaching Hospital, Ilorin, Nigeria.

### MATERIALS AND METHODS

All patients attending the venereology Clinic of the University Teaching Hospital, Ilorin, Nigeria between January 1993 and April 1995 with a complaint of genital ulceration, or found to be repeatedly reactive to serological tests for syphilis (STS) were included in the present report.

The criteria for the diagnosis of the various conditions were as follows:

- (a) Chancroid was diagnosed on the basis of the clinical presentation and on the demonstration of gram-negative coccobacillary forms in "Schools of Fish" appearance by the method described by Kraus and associates (5).
- (b) Lymphogranuloma venereum (LGV), genital herpes, condyloma acuminatum and oro-genital aphthosis were diagnosed on the basis of their history, clinical presentation and negative STS.
- (c) The diagnosis of painless indurated ulcers, with spirochaetes on dark-ground microscopy; or repeated positive STS with or without genital sores at the time of exami-

nation provided other causes of biological false positives (BFP) were eliminated.

- (d) Other conditions affecting the genitalia like onchocerciasis and Hansen's disease were diagnosed by means of histology slides on properly taken biopsies.

### Management of cases

Patients with chancroid were treated with either double strength trimethoprim/ sulphamethoxazole for 3 weeks or with a single injection of ceftriaxone (Rocephin) 1gm given intramuscularly or intravenously. Patients with primary syphilis were treated with daily injections of procaine penicillin 500,000 units for 15 days with 1gm probenecid orally. Those with post-primary syphilis were treated with injections of Benzathin Penicillin, 2.5 mega units followed by twice weekly injections of 1.4 megaunits for 3 weeks.

Patients with LGV were treated with either Sulphadiazine 2gm daily in 4 divided doses alone, or in combination with daily injections of streptomycin 1gm for 10 days. Herpes genitalia was treated with local applications of Saline water, and when secondarily infected, single strength trimethoprim/ sulphamethoxazole was given for one week.

The treatment of oro-genital aphthosis was with tetracycline, 2gm in 4 divided doses, daily, for one week with Vitamine B complex tablets; their hyperkeratotic conditions were treated with topical flumethasone pivalate/salicylic acid ointment (Locasalen). The treatment of Onchocerciasis and Hansen's disease were those of the systemic conditions.

### RESULTS

32 patients were found to have genital ulcer disease during the 28 month-study period: 28(87.5%) were males and 4(12.5%) were female. They were aged between 15 and 54 years, but 25(78.1%) were aged between 20 and 38 years (Table 1). Chancroid (18.7%) was the most common cause of genital ulceration in Ilorin.

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Age (Years)	No. of Patients			
	Male	Female	Total	%
15 – 19	1	1	2	(6.3)
20 – 24	8	1	9	(28.1)
25 – 29	6	2	8	(25)
30 – 34	5	-	5	(15.6)
35 – 39	3	-	3	(9.4)
40 and above	5	-	5	(15.6)
<b>TOTAL</b>	<b>28</b>	<b>4</b>	<b>32</b>	<b>(100)</b>

**Table 1:**  
**Age Distribution fo Patients with Genital Ulcer Disease in Ilorin, Nigeria**

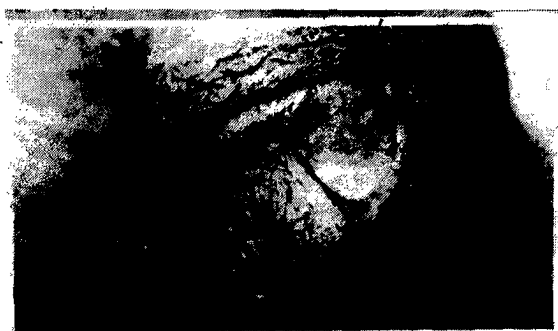
(Table 2). Other causes were primary syphilis, genital herpes, lymphogranuloma venereum and condyloma acuminatum, each responsible for 4(12.5%) of the 32 cases. Oro-genital aphthosis accounted for 3(9.4%) of the cases. A patient presented with a rash in the suprepubic region: the biopsy showed it was due to *Onchocerca volvulus*; while another patient with apersistently positive STS was found by ear-lobe biopsy to be suffering from Hansen's disease.

Patients with chancroid presented with a short incubation period of 1 to 7 days. 4 of the 5 patients with chancroid were treated with ceftriaxone with a very favourable response.

Of the 4 patients with primary syphilis one had gonorrhoea as well, he came because of the urethral discharge and dysusia.

Figure 1 is the primary chancre from this patient.

One of he 3 patients wit oro-genital aphthosis had paraesthesia and hyperkeratosis in a localized area on his right palm in addition to the usual genital and oral lesions.



**Figure 1: Showing Primary Chancre on the Penis**

Clinical Diagnosis	No. of Patients			
	Male	Female	Total	(% Total)
<b>Syphilis:</b>				
Primary	4	-	4	(12.5%)
Post primary	2	1	3	(9.4%)
Chancroid	5	1	6	(18.7%)
Herpes genitalis	4	-	4	(12.5%)
Lymphogranuloma Venereum	4	-	4	(12.5%)
Condyloma acuminatum	2	2	4	(12.5%)
Oro-genital aphthosis	3	-	3	(9.4%)
Others	4	-	4	(12.5%)
<b>TOTAL</b>	<b>28</b>	<b>4</b>	<b>32</b>	<b>(100%)</b>

**Table II**  
**Genital Ulcer Diseases in Ilorin, Nigeria**

1 patient each presented with cutaneous onchocerciasis, candidal balanitis, chronic BFP due to Hansen's disease, and multiple infection from genital herpes and chancroid.

## DISCUSSION

This report has shown that Chancroid is the commonest cause of genital ulcer disease in Ilorin, Nigeria, being responsible for 18.7 percent of all diagnosed cases. Primary syphilis, genital herpes, lymphogranuloma venereum and condyloma acuminatum occurred at an equal frequency of 12.5 percent. The actual prevalence of condyloma acuminatum in Ilorin should be higher than the present figure obtained from the Venereology Clinic, because many women with such complaints reported at the gynaecology clinic for management.

The method described by Kraus and associates (1) has made easy the identification of *Haemophilus ducreyi* from chancroid ulcers. Ceftriaxone (Rocephine) has also been found to be effective for the single-dose treatment of chancroid.

It is uncommon in other centres in Nigeria for patients to be seen with the primary chancro of syphilis and hence the resort to sero-epidemiologic surveys (6, 7). This is because syphilitic ulcers are painless and heal without leaving during the course of the present study because of multiple infections and secondary bacterial infections leading to painful ulcers. Also the prominence given to sexually transmitted diseases by the local television station in Ilorin helped to educate the public on the need to seek medical attention.

Three cases of post-primary syphilis and a case of chronic biological false positive (BFP) due to Hansen's disease were diagnosis on the basis of serological and histological tests. One has to interpret the results of STS with great caution because of the presence of BFPs, a subject that has been discussed by other authors (8, 9, 10).

Genital herpes is a condition that has not been much reported in Nigeria because of the death of virology culture techniques. However, Sogbetun and associates (11) demonstrated that a significantly high proportion of children and young adults in Ibadan have *Herpes simplex* type II antibodies in their blood. The condition is easily diagnosed by the presence of vesicles with erythematous base and superficial ulcers. Patients with LGV usually attend the clinic because of the painful inguinal bubo formation, although rarely the primary chancres may be seen at the first visit.

Balanitis is not common in Nigeria because most males are circumcised. Only one case was encountered during the present study and it was in an uncircumcised patient. The only case of perigenital cutaneous onchocerciasis reported here was only conclusively diagnosed by histological techniques. Adeyemi - Doro and associates (12) have similarly reported a case of perigenital cutaneous schistosomiasis in Ibadan. Although chancroid was found to be the commonest cause of genital ulcerations in Ilorin, primary syphilis, genital herpes and LGV were also common and occurred at equal frequencies. An

unusual presentation of oro-genital aphthosis with hyperkeratosis and paraesthesia of a localized area on the palm in addition to the usual genital and oral lesions was also reported. The hyperkeratosis responded well to local application of flumethasone pivalate/salicylic acid ointment. The importance of histological techniques for making the diagnoses of other tropical conditions like onchocerciasis, schistosomiasis and Hansen's disease that may localize around the genitalia was highlighted; and the correct use and interpretation of STS was advocated.

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