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Anogenital warts in patients attending the sexually transmitted diseases clinic in Ibadan, Nigeria

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Summary

One hundred and forty-eight cases of anogenital warts comprising 98 males and 50 females were seen at the Special Treatment Clinic, University College Hospital, Ibadan between May 1977 and 1984. The ages of the patients ranged from 11 months to 49 years. Ten cases occurred in children under 9 years. The peak incidence was in the 20-24 years age group. Local applications with podophyllin was the most frequently recommended therapy as the first line of treatment and producced a cure rate of 38.8% in those treated for three weeks. Thirty-three percent of the patients treated with podophyllin showed marked improvement before they were lost to follow up. Cryotherapy gave a cure rate of 85% but was recommended only for 20 patients. The clinical implication of these findings as well as the limitations encountered in the management of anogenital warts in a developing country are discussed.

Résumé

Entre mai 1977 et 1984 cent quarente-huit (148) cas de Condylome acuminatum ont ete vus a la consultation dans la clinique pour les maladies sexuellement transmises, de centre hospitalier Universitaire a Ibadan. 11 y avait 98 patients du sex male et 50 du sexe feminin. Leur ages est de 11 mois a 49 ans, avec 10 cas chez le enfants ages moins de 9 ans. D'incidence la plus haute se trouvait parmis les patients ages de 20 a 24 ans. D'application locale de la podophylline a ete la plus trequemment pracxtiquee comme therapie de premiere ligne. Cette application avait produit la cure 38.8% en troits semaines. 11 y avait une amelioration significative chez 32.9% des patients recevant la podophylline, la plus part d'entre eux n'avait pas complete la course de traitment. La cryotherapie avait produit la querison chez 85% permis les 20 patients inclus. L'implication clinique de ces decouvertes ainisi que les problems du traitment des verrues anogenitales dans le pays envoie du development sont discutes.

Introduction

Genital warts were known to the ancients and in modern times constitute a common cause for presentation at Sexually Transmitted Diseases (STD) clinics in many parts of the world[1]. While large numbers of cases are reported annually[2] in developed countries, there is scanty information on its prevalence in the developing countries of tropical Africa.

The aetiological agent of human genital warts is the human papilloma virus (HPV), a member of the papovavirus family[3]. The pathogenesis of the papovavirus has been clearly elucidated by Friedman and Fiaklow[4]. Recent studies show that in spite of the similarity in the clinical appearance of genital and non-genital warts, their aetiology differs[5], the cause of genital warts being HPV 6, HPV 11, and HPV 16[6]. The sexual transmissibility of genital warts which was a controversy for long has been clearly proved by Oriel[1,7]. While other STDs are frequently reported in Africa, reports on the incidence and management of genital warts remain scanty. The association of the viral agents reponsible for anogenital warts (HPV 16) with invasive carcinoma of the cervix[8,9] calls for a clear evaluation of the magnitude of the clinical problem anogenital warts constitute in the tropics. This study was undertaken to highlight the experience of an STD clinic in a developing country with respect to anogenital warts and to identify factors responsible for the under reporting of the condition.

Materials and methods

The study population comprised patients diagnosed as having anogenital warts at the Special Treatment

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Clinic of the University College Hospital, (UCH) Ibadan, Nigeria between May 1977 and December 1984. The patients were either referred from other outpatients' clinics in the hospital or presented directly without referral. A few were referred from centres outside the UCH.

Diagnosis of anogenital warts was based on the clinical finding of typical lesions on the external genitalia, the vagina, cervix or the perianal region. All the patients were screened for evidence of other sexually transmitted diseases such as gonococcal urethritis or cervicitis, trichomoniasis, candidiasis, non-specific urethritis and syphilis. Any concurrent infection was treated as appropriate.

The warts were treated either by the topical application of 25% podophyllin in tincture of benzoin or by cryotherapy with nitrous oxide using a cryoprobe, occasional cases of extensive vulval warts in pregnancy and other adults required surgery and 5 patients were treated with 50% solution of tricholoroacetic acid (TCA) when podophyllin was not available.

Podophyllin was applied to the lesion(s) twice weekly and was left on for 4 hours before being washed off. The first application was done by the nursing staff in the clinic while subsequent ones were done by the patient at home. The patients were reviewed at two-weekly intervals to assess their response to treatment. Cryotherapy was instituted on the day of presentation, followed by weekly appointments for further cryotheraphy where necessary until complete resolution of the lesions was achieved. All those who failed to show any response to podophyllin after 6 weeks were similarly treated with cryotheraphy. Other indications for cryotherapy treatment were those who had extensive ulceration at the site of podophyllin application, intrameatal, intravaginal and cervical growths.

Results

During the period of the study, 148 cases of anogenital warts comprising 98 males and 50 females were diagnosed (Table 1). Lesions occurred in children (Fig. 1) as well as in adults (Figs. 2(a), 2(b), 3). The ages of the patients ranged from 11 months to 49 years, the peak incidence being in the 20-24 years age range. One hundred and thirty (87.8%) of the patients were referred from various clinics, majority of them coming from the general out-patient clinic of the University College Hospital.

Table 1: Annual record of patients presenting with anogenital warts May 1977 - December 1984

Year	Male	Female	Total
1977	8	3	11
1978	11	10	21
1979	7	9	16
1980	15	6	21
1981	12	10	22
1982	11	0	20
1983	13	5	18
1984	15	4	19
Total	98	50	148

28 cases of concurrent genital infections were seen, with vaginal candidosis (10 cases) constituting the most common type. Tinea cruris and non-specific vaginitis were seen in 6 patients each, while 2 patients were seroreactive for syphilis with veneral diseases research laboratories (VDRL) titres of 1 : 32, 1 : 64 and positive *Treponema pallidium* haemagglutination (TPHA) test.

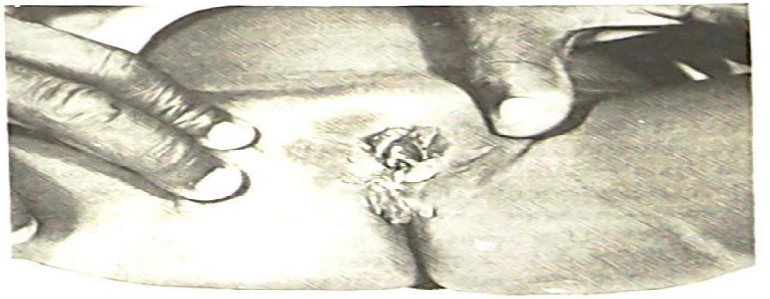
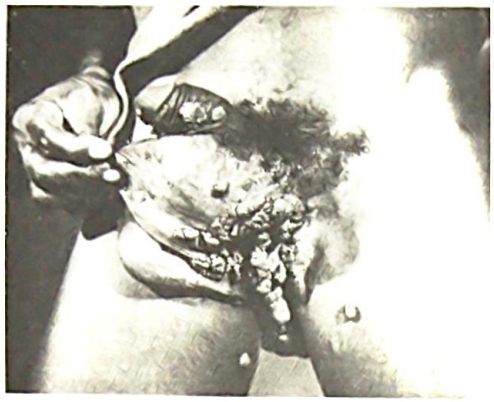


Fig. 1: Vulval warts in a 1 1/2 year old female child.



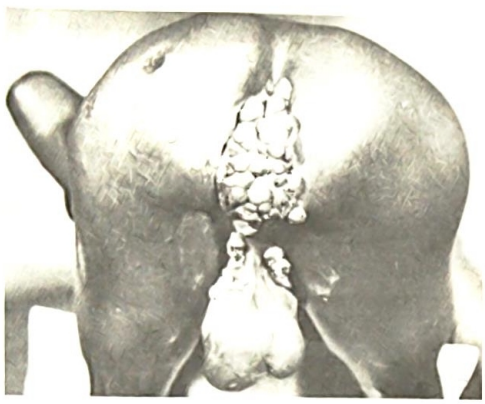


Fig. 2(a and b): Large peri-anal, scrotal and penile warts in a 43 year old man.

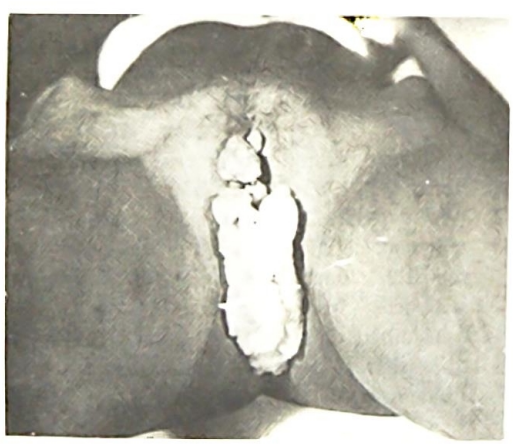


Fig. 3: Large intravaginal and vulval warts occluding the introitous in a 26 year old woman.

One hundred and twelve patients were treated with podophyllin. Of these, 33 (38.8%) showed complete healing of their lesions within three months, 28 (32.9%) showed steady improvement until they were lost to follow up, while 27 defaulted after the first application, and were hence excluded from the analysis. Twenty patients (17.9%) did not show any response to therapy, and 4 (4.7%) had extensive ulceration warranting discontinuation of podophyllin therapy.

Twenty patients were treated by cryotherapy. Of these 17 (85%) showed complete healing of their lesions, 2 defaulted after initial application while 1 failed to respond after 3 weeks of treatment and subsequently defaulted. Of the 5 patients treated with TCA, 1 was cured, 2 improved while the remaining two failed to respond and were therefore treated by cryotheraphy.

Discussion

Anogenital warts are seen infrequently at the Special Treatment Clinic (STC), Ibadan, and when they present, the patients are usually referred from some other clinic where medical attention had been previously sought. This contrasts with the situation in gonococcal infections and other common STDs where the patients usually present directly at the STC without referral. A plausible deduction from this observation is that the general population is unaware of the sexual transmissibility of genital warts, and thus the low incidence of genital warts at our unit, relative to reports from advanced centres of the world[1,2].

The age range of peak incidence among our patients is 20-24 year range and corresponds to that of gonorrhoea and syphilis. This finding, coupled with the most usual sites of the warts — around the corona sulcus, the vulva, and the external urethral meatus (Figs. 1, 2(a), 2(b) & 3) are in support of sexual transfer of the lesions. The presence of similar lesions in sexual partners are not a regular finding.

The response to the two main forms of treatment show clearly that cryotheraphy is to be preferred as it achieves complete cure in 85% of those treated, while podophyllin is curative in only 38.8% of those treated for 3 weeks. However, improvement in 32.9% of the patients treated with podophyllin before default combined with 38.8% cure rate suggests continued usefulness of podophyllin in the treatment of anogenital lesions at accessible sites. A consistent problem in patient care and evaluation of response to

different treatment schedules in the management of STDs in Nigeria is the high default rate. Whenever symptoms start to abate, whatever its aetiology, a large proportion of our patients discontinue clinic attendance. This is probably due to limitations in medical facilities and personnel which combine to prolong the clinic stay for the patients. Most often incomplete follow-up when lesions have started to regress is an indication of eventual cure. When recurrence occurs or there is failure of complete resolution, the patients reappear after a variable length of time.

The superiority in the cure rate shown by cryotheraphy over podophyllin would have ordinarily been expected to make cryotherapy the treatment of first choice for this condition. However the long clinic time taken up for its application and the non-availability of the equipment and nitrous oxide in most institutions in Nigeria limits its use to those centres that have the facility. Epithelial lesions including oral lesions have been found to respond rapidly to cryotheraphy[11] and should be so managed.

The precise magnitude of the problem of anogenital warts in Nigeria is not known and its causal relationship with cancer of the cervix deserves further investigation. It has been shown that genital ulcers facilitate the transmission of the human immunodeficiency virus (HIV)[12]. The role of anogenital warts in this regards is yet to be determined. Public enlightenment campaigns in developing countries should be intensified in relation with diseases like genital warts and the acquired immunodeficiency syndrome (AIDS) which are still associated with misconceptions and ignorance. More centres in developing countries should report their cases and clinical experiences to provide more data, and for a better understanding of the magnitude of problems posed by anogenital warts as an STD in developing countries.

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