HIV and circumcision: new factors to consider

Kebaabetswe et al obviously believe the conventional wisdom that heterosexual sex is the major vector for the transmission/reception of HIV, and that male circumcision is an effective deterrent to infection. Based on that belief, they have constructed an elaborate and persuasive argument to support their advocacy of routine male circumcision. It is unlikely that anyone capable of putting together such a well-thought-through argument would不明白ly believe the evidence to the contrary. If the editors of *Sexually Transmitted Infections* choose to also publish it in a future paper issue, they will be giving their readers another important source of information about this sensitive topic.

Kebaabetswe et al have not shown that circumcision is efficacious in preventing the spread of HIV. At best, they have shown that it may have had some potential for decreasing the spread of HIV in Botswana, and that it may have had a psychological effect on the men of that country. But it is clear that circumcision is not a panacea for all the problems of HIV/AIDS. Indeed, circumcision may actually increase the spread of HIV if it is not properly performed in a safe and sterile manner.

Discussion

It has been believed since about 1988 that heterosexual coitus accounts for 90% of HIV transmission in Africa. Many studies do argue that circumcision can reduce the risk of HIV transmission through heterosexual coitus. The quality of these studies has been critically discussed by their methodological flaws, including their failure to control for numerous confounding factors. Gray et al found that transmission by coitus is unlikely to account for the explosive HIV epidemic in sub-Saharan Africa. It now appears that these studies do not account for the largest confounding factor of all—iatrogenic transmission of HIV. Earlier this year the International Journal of STD & AIDS published a trilogy of articles on the role of medical and surgical interventions in the transmission/reception of HIV. These articles argue strongly that unsafe healthcare practices, especially non-sterile injections, are the principal vectors by which HIV is transmitted. A review of the literature of mass circumcision would destroy the natural protections of the foreskin, further expose children to an apparently unsafe healthcare system, and would be more likely to increase than decrease infection.

Bioethics and human rights

Finally, we would like to address the legal and ethical issues. As noted above, male circumcision excises a large amount of functional healthy erogenous tissue from the penis. It is a clear violation of the basic human right to privacy. Several authorities report that circumcision degrades the erectile function of the penis. Circumcision, therefore, must be regarded as degrading treatment. Degrading treatment is an additional violation of human rights. The leading international statement of medical ethics is the European Convention on Human Rights and Bioethics. Article 2 of the convention prohibits non-therapeutic tissue removal from those who do not have the capacity to consent. Children have a right to the protection of the security of their person and to protection from degrading treatment. Circumcision would violate those human rights. Doctors must respect patient human rights. Prophylactic circumcisions ethically may not be carried out on minors. Circumcisions, therefore, would have to be limited to adult males who legally may give informed consent.

Approval of circumcision by the surveyed Botswana people obviously is based on their belief that circumcision is efficacious in preventing the spread of HIV. If circumcision fails to control HIV, there would be disillusionment and anger. African males would have sacrificed their erogenous tissue for a false hope of preventing HIV infection. There is no evidence that Kebaabetswe et al have considered the political issues that would arise if a circumcision experiment should fail.

Conclusion

Kebaabetswe et al propose the universal circumcision of male children in Botswana. They accept without question that HIV is primarily sexually transmitted in Africa by heterosexual coitus and that circumcision reduces or prevents the transmission of HIV. However, there is already a substantial incidence of infection among children in South Africa as a result of iatrogenic infection from non-sterile injections, etc. They have not shown that safe, aseptic circumcisions can be delivered in Botswana. A programme of mass circumcision would destroy the natural protections of the foreskin, further expose children to an apparently unsafe healthcare system, and would be more likely to increase than decrease infection.

Even if circumcision eventually should be shown to provide some protection against HIV infection, that protection could only work to reduce the 30% of infections that now are attributed to sexual activity. It would have no effect on the other 70%. Its effect, therefore, would be minimal at best and could not have an effect for the first 13 years, during which time behavioural changes could be introduced into society through education, and a HIV vaccine could be developed to provide immunity.

Circumcision of male children with the intent of reducing an epidemic not of their making is unacceptable from medical, ethical, and legal perspectives. As a public health
measure, male neonatal circumcision fails all tests.\textsuperscript{4}

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Coexistent cranial tuberculomas and tuberculosis of the cervix in a postmenopausal woman

Postmenopausal genital tuberculosis, especially tuberculosis of cervix, is rare. We present a case of a postmenopausal woman presenting with multiple cranial lesions and evidence of a silent granulomatous pathology in the cervix.

Case report

A 52 year old woman was admitted with complaints of increasing headaches and generalised weakness for the past 3 months. There were no other neurological symptoms and she denied any history of fever, cough, diarrhoea, bone pains, vaginal discharge, bleeding, dyspareunia, abdominal discomfort, or weight loss. She was postmenopausal for 2 years with a normal menstrual history previously. There was no history of extramarital sexual contacts or any venereal disease in the patient or her spouse. Examination of cardiovascular, chest, abdominal, and nervous system was unremarkable. Breast examination was normal.

Gynaecological examination revealed an abnormal cervix with a small growth and evidence of a silent granulomatous pathology in the cervix.

Postmenopausal genital tuberculosis is uncommon, possibly because of hormone dependence of infection and inconstant blood supply at younger ages.\textsuperscript{4} Tubercular cervicitis is rare with an approximate incidence of 2.5–10% of all genital tuberculosis.\textsuperscript{5} Primary involvement of the cervix is still rarer, and is thought to be either sexually transmitted through a partner with epididymo-orchitis or through his infected sputum used as a lubricant.\textsuperscript{6} Tuberculomas are circumscribed focal granulomatous masses of tubercular origin, which may be single or multiple, vary in size, perilesional oedema or meningeal reaction, produce variable clinical features, and are uncommon at extremes of age.\textsuperscript{7} CSF examination and polymerase chain reaction may be normal in pure parenchymal forms of CNS tuberculosis.\textsuperscript{8} Tuberculotic bacilli may be scant in hypertrophied cervix and lead to a negative acid fast bacilli stain and culture.

In the present case, we were considering both an infective as well as a mitotic pathology. Since women are known to

interval thereafter has shown resolution of lesions.

Comment

Both central nervous system (CNS) tuberculosis and genital tract tuberculosis are observed in endemically affected populations. Usually, the primary focus is elsewhere, the most common being the lung.\textsuperscript{2} and is silent by the time the disease manifests in the CNS or the genital tract. An accurate estimate of the incidence of genital tuberculosis is difficult because of infected asymptomatic carriers\textsuperscript{3} with genital tuberculosis being diagnosed more in relation to infertility.\textsuperscript{14} Postmenopausal genital tuberculosis is uncommon, possibly because of hormone dependence of infection and inconstant blood supply at younger ages.\textsuperscript{4} Tubercular cervicitis is rare with an approximate incidence of 2.5–10% of all genital tuberculosis.\textsuperscript{5} Primary involvement of the cervix is still rarer, and is thought to be either sexually transmitted through a partner with epididymo-orchitis or through his infected sputum used as a lubricant.\textsuperscript{6} Tuberculomas are circumscribed focal granulomatous masses of tubercular origin, which may be single or multiple, vary in size, perilesional oedema or meningeal reaction, produce variable clinical features, and are uncommon at extremes of age.\textsuperscript{7} CSF examination and polymerase chain reaction may be normal in pure parenchymal forms of CNS tuberculosis.\textsuperscript{8} Tuberculotic bacilli may be scant in hypertrophied cervix and lead to a negative acid fast bacilli stain and culture.

In the present case, we were considering both an infective as well as a mitotic pathology. Since women are known to

Figure 1 Cranial MRI, post-contrast sagittal section showing ring enhancing lesions (arrows) in the cerebral hemispheres and cerebellum.

Figure 2 Histopathology of the cervix biopsy specimen showing multiple epithelioid cell granulomas (large arrow) with giant cells (small arrow).
harbour asymptomatic genital tuberculosis, a thorough clinical examination can be helpful in the presence of cranial lesions with a wide differential diagnosis.

Contributors

RB, SP, PR, DS, SG were following this patient clinically; RS provided the pathology details and the image; the manuscript was written by RB and read, edited, and finalised by all authors.

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Serporevalence of reproductive tract infections in women in northern India—a relatively low prevalence area

Recent years have witnessed a growing concern about the reproductive tract infections (RTI), especially those that are sexually transmitted. The serious threat of AIDS has further drawn attention to the importance of RTI sexually transmitted diseases (STD), especially in developing countries like India where RTI diagnosis and treatment facilities are extremely limited. Women with RTI are asymptomatic, which if undetected or untreated can lead to complications in the index woman. It is, therefore, worthwhile screening of all women of reproductive age for various RTI so that appropriate interventions can be planned and initiated.

We analysed a total of 2526 women attending the antenatal outpatient department of obstetrics and gynaecology of Neelur Hospital attached to Post Graduate Institute of Medical Education and Research, Chandigarh, for screening of RTI during a 3 year period. This project was approved by the institute’s ethics committee. The women were divided into six groups based on clinical histories and various signs and symptoms: group I, pregnant women (n = 600); group II, contraceptive advice seekers (n = 378); group III, contraceptive users (n = 525); group IV, women with infertility (n = 464); group V, women with leucorrhoea (n = 288); group VI, women with a diagnosis of pelvic inflammatory disease (n = 288). Endocervical swabs were collected from all patients and were sent to the microbiology laboratory for Gram stain and culture of Neissera gonorrhoeae (New York city medium). ELISA was also carried out for antigen detection of N gonorrhoeae (Abbott laboratories) and Chlamydia trachomatis (Chlamydia CELISA, Cellabs Pvt, Ltd, Brookvale, Australia). Venous blood was collected from all patients, sera were separated and stored at −20°C till further use. Sera were subjected to the standard Venereal Disease Research Laboratory (VDRL) test and Treponema pallidum haemagglutination (TPHA) test (Serodia-TPHA, Fujirebio Inc, Tokyo, Japan) for syphilis, enzyme linked immunosorbent assay (ELISA) for HbsAg (Auszyme Monoclonal, Abbott Laboratories, Tokyo, Japan) for hepatitis B infection, enzyme linked immunosorbent assay (ELISA) for HbsAg (Fujirebio Inc, Tokyo, Japan) for hepatitis B infection, enzyme linked immunosorbent assay (ELISA) for Hepatitis C virus (HCV) (Abbott Laboratories, USA), and HIV (HIV-1/HIV-2) (Serodia-TPHA, Fujirebio Inc, Tokyo, Japan) for syphilis, enzyme linked immunosorbent assay (ELISA) for hepatitis B virus (HBV) (Chlamydia CELISA, Cellabs Pvt, Ltd, Brookvale, Australia). Western blot was done if ELISA for HIV was positive.

The mean age of the women in the study group was 30.6 years and the parity ranged from 1 to 6. Overall, seroprevalence of RTI in various groups was 1.82% (n = 46/2526).

| Table 1 | Seroprevalence of RTI in the various groups of women |
|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Tests positive | Group I (n = 600) | Group II (n = 378) | Group III (n = 525) | Group IV (n = 464) | Group V (n = 288) | Group VI (n = 271) |
| Syphilis | 6 | 3 | 0 | 4 | 1 | 3 | 17 (0.67%) |
| Gonorrhoea | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C trachomatis infection | 6 | 1 | 1 | 3 | 0 | 0 | 11 (0.43%) |
| Hepatitis B | 9 | 0 | 4 | 0 | 0 | 0 | 17 (0.67%) |
| HIV | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 21 | 4 | 5 | 11 | 1 | 4 | 46 (1.82%) |

Group I, pregnant women; group II, contraceptive advice seekers; group III, contraceptive users; group IV, women with infertility; group V, women with leucorrhoea; group VI, women with diagnosis of pelvic inflammatory disease.
Chaperoning in genitourinary medicine: supporting patients and protecting doctors

I read with interest the result of the postal survey regarding chaperoning in genitourinary medicine (GUM) clinics. The notable observation is that female patients were offered a chaperone far more often than male ones (on all occasions when the examiner was a male (32/32) and frequently when the examiner was a female (13/40)). Chaperoning was offered less frequently when the patient was a male with a female examiner (7/37) and infrequently with a male examiner (3/39).

GUM nurses and doctors are particularly vulnerable because the open access of the services exposes them to situations where they have no prior knowledge of the patient’s background, social, behavioural, psychological or mental state. The vulnerability is accentuated by the fact that sexual history and intimate examination are part of the routine clinical assessment in most of the situations. This vulnerability was called into a course of action in our clinic in 1996 when a senior male clinical assistant was a recipient of allegations (from a male patient in his 50s). The clinical assistant was nearing retirement, after an unblemished long service in general practice, with over 20 years’ experience as an assistant in GUM. The patient exhibited extremes of behaviour, grandiose imagination, and swings of mood, which became a reason for clinical concern. The concerns were raised with the patient’s general practitioner (GP) who advised that the patient suffered problems with alcoholism and was undergoing mental rehabilitation, and that he would attend the patient’s condition urgently at home. The GP telephoned the clinic later to indicate that the patient had recovered from his episode and he would like to speak with the consultant GU physician. The patient offered a clear and reasonable course of behaviour and was advised to return to the clinic when he had recovered.

To improve the quality of STI health care causes a cost effective reduction in HIV prevalence and STI incidence. Despite the introduction of national standard treatment guidelines (STGs), based on the syndromic management approach (where antibiotics are prescribed according to algorithms and non-medicinal aspects of care are emphasised), poor case management has been found in rural KZN clinics. This study determined the quality of care received by STI patients at King Edward VIII Hospital (KEH), Durban. As the province’s main academic hospital, KEH has represented the best level of health care causes a cost effective reduction in HIV prevalence and STI incidence. This continuity of care is viewed in the light of providing support to patients and protection to staff.

The notable concerns were raised with the patient’s medical practitioner (7/37) and infrequently with a male examiner (3/39).

The drug treatment of 97 black African outpatients with STI (73% female, average age 29 years) was compared with STGs. Patients also completed a questionnaire assessing non-drug management. Drug treatment complied with STGs in 79% of patients. When assessment included non-drug measures (partner notification cards, condoms, and correct drugs) it fell to 24% compared to 9% found among nurses, with stimulated patients in rural KZN clinics. Although overall care appears better in the urban setting, the real difference is at the level of drug treatment (where 79% of 41% received recommended drugs), as in both cases only about a quarter of the patients who had correct drug treatment also received appropriate non-drug care. Patients had appropriate counselling in 56% of cases. This was measured in terms of receiving at least one message in each of the five categories shown in table 1. Despite 72% of patients being encouraged to use condoms, 52 patients were not shown how to do this. Of these, only 31 knew how to use them.

Care givers were interviewed and vignettes were used to compare ideal and actual practice. Barriers to patient care and possible solutions were canvassed. All care givers gave appropriate answers for the ideal management of their fictitious case, but reported a difference between ideal management and actual practice in terms of non-drug aspects of management. All care givers failed to give drug information and to promote health seeking behaviour. Barriers to patient care were lack of time, staffing shortages, and motivation. There was a perception that non-drug management was not the responsibility of the tertiary care giver.

Care givers favoured the option of introducing a packet containing information, condoms, and a referral card, which could be issued with medication. In rural KZN a similar intervention resulted in improved case management in 85% of cases compared with a control group of 12% (p<0.005). Such packets could help improve STI management in this tertiary setting, which has no dedicated STI clinic.

Acknowledgements

The authors wish to thank the interviewers, the staff of KEH, and the patients who participated, as well as Immo Kleinschmidt and Andy Gray who gave statistical advice.

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Table 1: Categories of patient counselling showing one important example in each category

<table>
<thead>
<tr>
<th>Counseling category</th>
<th>Example</th>
<th>“Yes” response (%)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug information</td>
<td>Told to take medicine</td>
<td>65</td>
<td>55 to 74</td>
</tr>
<tr>
<td>Partner referral</td>
<td>Told partner must be treated</td>
<td>56</td>
<td>45 to 66</td>
</tr>
<tr>
<td>Health seeking</td>
<td>Told about the signs of STI</td>
<td>50</td>
<td>39 to 60</td>
</tr>
<tr>
<td>Risk reduction</td>
<td>Told that STI enhances HIV risk</td>
<td>57</td>
<td>46 to 67</td>
</tr>
<tr>
<td>Condom promotion</td>
<td>Encouraged to use condoms</td>
<td>72</td>
<td>62 to 81</td>
</tr>
</tbody>
</table>

Reference


STI case management at a South African teaching hospital

In South Africa, KwaZulu-Natal (KZN) is at the centre of the HIV epidemic and sexually transmitted infections (STIs) are endemic in this province. Improving the quality of STI health care causes a cost effective reduction in HIV prevalence and STI incidence. Despite the introduction of national standard treatment guidelines (STGs), based on the syndromic management approach (where antibiotics are prescribed according to algorithms and non-medicinal aspects of care are emphasised), poor case management has been found in rural KZN clinics. This study determined the quality of care received by STI patients at King Edward VIII Hospital (KEH), Durban. As the province’s main academic hospital, KEH has represented the best level of health care for the average citizen of KZN since 1936. Patients with STI are managed syndromically.

Male circumcision in Britain: findings from a national probability sample survey

Studies from developing countries\(^1\) and sexually transmitted diseases clinics in developed countries\(^2\) show that male circumcision appears to protect against some ulcerative sexually transmitted infections (STIs) and decreases the risk of HIV infection.\(^3\) We used data from the 2000 British National Survey of Sexual Attitudes and Lifestyles (Natsal 2000)—a large scale, stratified, probability sample survey—to estimate the prevalence of male circumcision in Britain and investigate its association with key demographic characteristics, sexual behaviours, and reported STI diagnosis. Natsal 2000 methodology details are published elsewhere.\(^4\) For the purposes of this investigation, data from targeted oversampling of black Caribbean, black African, Indian, and Pakistani groups (the Natsal ethnic minority boost) were combined with the main survey data in order to increase the numbers of these respondents included in the analysis. All data were weighted to be representative of the British population and analyses were performed using Stata version 6.0 to take into consideration Natsal 2000’s complex survey design.\(^5\) We found 15.8% (95% confidence interval (CI) 14.7 to 17.1) of British men aged 16–44 years reported being circumcised in Natsal 2000. Age specific prevalence was greatest among men aged 40–44 years (19.6%, 95% CI 16.8 to 22.7) compared to those aged 16–19 years (11.7%, 95% CI 9.0 to 15.2). With the exception of black Caribbeans, men from all ethnic minority backgrounds were significantly more likely to be circumcised compared to men who described their ethnicity as white (\(\text{OR} = 5.3\%, \text{CI} 1.7 \text{ to } 1.7\), \(p = 0.001\)). In addition, men born abroad instead of in Britain were significantly more likely to be circumcised (\(\text{OR} = 2.7 \text{, CI} 1.2 \text{ to } 5.3\), \(p = 0.01\)) and those born in London were significantly more likely to be circumcised (\(\text{OR} = 1.9 \text{, CI} 1.5 \text{ to } 2.4\), \(p = 0.001\)).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Cumulative incidence of reported previous STI diagnosis by circumcision status among men aged 16–44 years in Britain (Natsal 2000*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncircumcised(%) &amp; Circumcised(%) &amp; OR for being circumcised</td>
<td></td>
</tr>
<tr>
<td>(95% CI) &amp; (95% CI) &amp; (95% CI) &amp; p Value</td>
<td></td>
</tr>
<tr>
<td>Any STI &amp; 10.8 (9.8 to 12.0) &amp; 11.1 (9.0 to 13.7) &amp; 1.03 (0.80 to 1.34) &amp; 0.815</td>
<td></td>
</tr>
<tr>
<td>Any bacterial STI &amp; 5.9 (5.1 to 6.8) &amp; 6.4 (4.8 to 8.5) &amp; 1.09 (0.77 to 1.55) &amp; 0.618</td>
<td></td>
</tr>
<tr>
<td>Any viral STI &amp; 4.3 (3.8 to 5.3) &amp; 4.7 (3.4 to 6.5) &amp; 1.05 (0.72 to 1.55) &amp; 0.789</td>
<td></td>
</tr>
<tr>
<td>Gonorrhoea &amp; 1.1 (0.8 to 1.6) &amp; 1.5 (1.0 to 2.6) &amp; 1.31 (0.67 to 2.58) &amp; 0.432</td>
<td></td>
</tr>
<tr>
<td>Genital chlamydia &amp; 1.5 (1.1 to 1.9) &amp; 2.0 (1.7 to 2.5) &amp; 1.81 (1.01 to 3.1) &amp; 0.042</td>
<td></td>
</tr>
<tr>
<td>Syphilis &amp; 0.2 (0.0 to 0.6) &amp; 0.3 (0.0 to 1.0) &amp; 1.29 (0.27 to 6.0) &amp; 0.748</td>
<td></td>
</tr>
<tr>
<td>Non-specific urethritis &amp; 3.5 (2.8 to 4.2) &amp; 4.0 (2.7 to 5.9) &amp; 1.17 (0.74 to 1.84) &amp; 0.501</td>
<td></td>
</tr>
<tr>
<td>Genital herpes &amp; 1.0 (0.8 to 1.4) &amp; 1.1 (0.6 to 2.3) &amp; 1.01 (0.51 to 2.38) &amp; 0.804</td>
<td></td>
</tr>
<tr>
<td>Genital warts &amp; 3.6 (3.0 to 4.3) &amp; 3.8 (2.6 to 5.5) &amp; 1.04 (0.67 to 1.63) &amp; 0.858</td>
<td></td>
</tr>
<tr>
<td>Trichomonas &amp; 0.4 (0.2 to 0.7) &amp; 0.1 (0.0 to 0.5) &amp; 0.26 (0.04 to 1.62) &amp; 0.148</td>
<td></td>
</tr>
</tbody>
</table>

*In addition to the main Natsal 2000 sample, an additional sample (unweighted/weighted) of 406/299 men from black Caribbean, black African, Indian, and Pakistani ethnic groups were recruited in order to provide more robust data for these population subgroups.

\(\*\)Unweighted/weighted bases for uncircumcised men are 4833/3795, respectively, and for circumcised men are 913/982, respectively.

\(\*\)Gonorrhoea, genital chlamydia, syphilis, non-specific urethritis, genital herpes, genital warts, and trichomonas.

\(\*\)Gonorrhoea, genital chlamydia, syphilis, non-specific urethritis.

\(\*\)Genital herpes and genital warts.
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Conflict of interest: None declared.

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References

Cutaneous larva migrans of the penis

Cutaneous larva migrans (CLM) is a distinctive cutaneous eruption caused by the invasion and migration of larva of parasites in skin. It is also known by various other names, such as creeping eruption, sand worm, plumber’s itch, duck hunter’s itch, and epidermalitis linearis migrans. CLM occurs commonly in exposed areas, such as feet, buttocks, and hand. Isolated occurrence of CLM on the penis is very rare and, hence, rarely reported.

A 24 year old unmarried male agricultural labourer presented with itchy lesions on the penis, for a period of 5 days’ duration. The lesion started on the tip of the prepuce and gradually progressed upwards in a serpentine fashion. He had no lesions elsewhere on the body. He denied a history of premarital sexual contact but had visited a beach resort. He had not applied any topical medication on his penis.

On physical examination, the patient was uncircumcised. A linear serpentine lesion was seen extending from the tip of the prepuce to the shaft on the ventral aspect of the penis (fig 1). He had no other skin lesions.

His routine haemogram and serum biochemistry were within normal limits. Stool examination did not reveal any parasites. A clinical diagnosis of cutaneous larva migrans was made and he was put on oral albendazole 400 mg twice daily for 3 days. The lesion stopped progressing after 2 days of treatment. The lesion completely subsided by 7 days and there was no recurrence at follow up after 4 weeks.

Cutaneous larva migrans is a self limiting dermatitis commonly known as “creeping eruption,” because of its distinctive feature that the lesion creeps or migrates caused by the presence of a moving parasite in the skin. CLM has a worldwide distribution though it is common in the tropics and subtropics. The occurrence of CLM is influenced by poor sanitation and appropriate environmental conditions.

The clinical features of CLM may vary from non-specific dermatitis to typical creeping eruption. The initial lesion starts as an erythematous itchy papule. Soon, a slightly raised flesh coloured swollen lesion about 2–3 mm thick develops and forms linear, serpentine (serpiginous), or bizarre tracts. The larva migrates about 2 cm per day and forms the tortuous tracts. Sometimes, multiple vesicles may appear along the tract. Rarely, hundreds of tracts may be seen in a severely infected person.

Cutaneous larva migrans can be grouped into several types depending upon the species responsible for the lesions and their clinical appearance. They are type 1 (caused by animal hookworms), type 2 (human hookworms), type 3 (human strongylodes), type 4 (animal strongylodes), type 5 (Gnathostoma), and type 6 (insect larva). CLM is usually caused by third stage larva (filariform larva) of dog and cat hookworms (Ankylostoma caninum and Ankylostoma braziliense, respectively) and rarely by Uncinaria stenocephala, Bunostomum phlebotomum, or the human larvae of Neotanneramericanus and Ankylostoma duodenale.

Cutaneous larva migrans is usually self limiting but the symptoms (itching) and possible complications warrant treatment. Various physical treatments, such as surgery and cryotherapy, have been tried with little success. The topical treatments that have been used include 15% thiabendazole, 2% gammexane cream, 25% piperazine citrate, and metrifonate. Though many types of treatment have been used, albendazole is considered to be the drug of choice. Albendazole is used in the dosage of 400–800 mg/day for a period that may vary from 1–7 days. Eradication of larva causing CLM is impractical, but avoiding contact with contaminated soil of beaches can prevent it.

In our patient the localisation of CLM was unique and this could possibly be attributed to the habit of not wearing underwear when playing on the beach, thus predisposing him to develop lesions on genitalia.

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