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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.[4]

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 report being circumcised compared to men who described their ethnicity as white ((adjusting for demographic variables: age, global region of birth, ethnicity, residence in London, religion, and qualifications) adjusted odds ratio (OR) for self reporting ethnicity as other than white 3.02, 95% CI 2.39 to 3.81, $p<0.001$). In addition, men born abroad instead of in Britain were significantly more likely to be circumcised ((adjusting for demographic variables: age, global region of birth, ethnicity, residence in London, religion, and qualifications) adjusted OR 1.74, 95% CI 1.25 to 2.42, $p<0.001$). Significant ($p<0.001$) variations in the prevalence of circumcision were also observed across the major religious groups, with prevalence being greatest among Jewish men (98.7%, 95% CI 90.1 to 99.8) and lowest among Hindus, Sikhs, and Buddhists (9.8%, 95% CI 4.7 to 9.3). Relative to uncircumcised men, circumcised men were more likely to report having had homosexual partner(s) (7.5% *v* 5.3%, $p = 0.012$) and partners from abroad (19.7% *v* 13.1%, $p<0.001$).

We did not find any significant differences in the proportion of circumcised and uncircumcised British men reporting ever being diagnosed with any STI (11.1% compared with 10.8%, $p = 0.815$), bacterial STIs (6.4% cf 5.9%, $p = 0.628$), or viral STIs (4.7% cf 4.5%, $p = 0.786$) (table 1). We also found no significant associations between circumcision and being diagnosed with any one of the seven specific STIs.

Our findings confirm that the prevalence of male circumcision among British men appears to be declining. This is despite an increase in the proportion of the British population describing their ethnicity as non-white.[5] The lack of association between circumcision status and STI history in this population is consistent with findings from other developed countries[6] and may be because of relatively low prevalence of STIs in this setting, as well as the relatively small proportion of the population who are circumcised.

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Contributors

SD drafted the paper and participated in the statistical analysis, with contributions from CM; KF, AJ, KW, and RE were co-investigators and participated in the design and management of the main study.

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Table 1 Cumulative incidence of reported previous STI diagnosis by circumcision status among men aged 16–44 years in Britain (Natsal 2000*)

	Uncircumcised†% (95% CI)	Circumcised†% (95% CI)	OR for being circumcised (95% CI)	p Value
Any STI‡	10.8 (9.8 to 12.0)	11.1 (9.0 to 13.7)	1.03 (0.80 to 1.34)	0.815
Any bacterial STI§	5.9 (5.1 to 6.8)	6.4 (4.8 to 8.5)	1.09 (0.77 to 1.55)	0.628
Any viral STI¶	4.5 (3.8 to 5.3)	4.7 (3.4 to 6.6)	1.05 (0.72 to 1.55)	0.789
Gonorrhoea	1.1 (0.8 to 1.6)	1.5 (0.8 to 2.6)	1.31 (0.67 to 2.58)	0.432
Genital chlamydia	1.5 (1.1 to 1.9)	1.2 (0.7 to 2.2)	0.81 (0.41 to 1.61)	0.555
Syphilis	0.2 (0.0 to 0.6)	0.3 (0.0 to 1.0)	1.29 (0.27 to 6.05)	0.748
Non-specific urethritis	3.5 (2.8 to 4.2)	4.0 (2.7 to 5.9)	1.17 (0.74 to 1.84)	0.501
Genital herpes	1.0 (0.8 to 1.4)	1.1 (0.6 to 2.3)	1.10 (0.51 to 2.38)	0.804
Genital warts	3.6 (3.0 to 4.3)	3.8 (2.6 to 5.5)	1.04 (0.67 to 1.63)	0.858
Trichomonas	0.4 (0.2 to 0.7)	0.1 (0.0 to 0.5)	0.26 (0.04 to 1.62)	0.148

*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 estimates for these population groups.
†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, and non-specific urethritis.
¶Genital herpes and genital warts.

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Conflict of interest: None declared.

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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.[1] It is also known by various other names, such as creeping eruption, sand worm, plumber's itch, duck hunter's itch, and epidermatitis linearis migrans.[2] CLM occurs commonly in exposed areas, such as feet, buttocks, and hand.[1] Isolated occurrence of CLM on the penis is very rare and, hence, rarely reported.

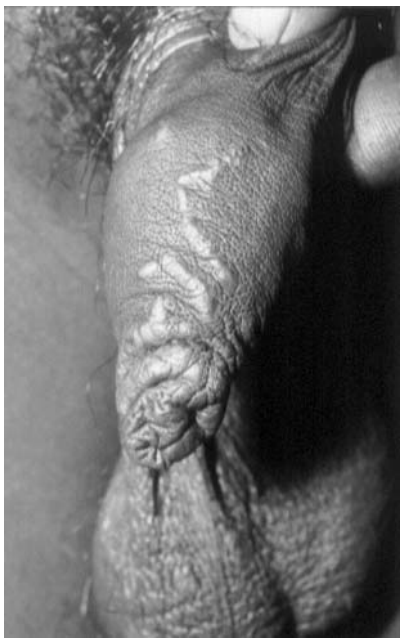

Figure 1 A linear serpentine lesion seen extending from the tip of the prepuce on to the shaft.

A 24 year old unmarried male agricultural labourer presented with itchy lesions on the penis 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,''[2] 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.[2] The occurrence of CLM is influenced by poor sanitation and appropriate environmental conditions.[3]

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 2–5 cm per day and forms the tortuous tracts.[4] Sometimes, multiple vesicles may appear along the tract. Rarely, hundreds of tracts may be seen in a severely infected person.[5]

Cutaneous larva migrans can be grouped into several types depending upon the species responsible for the lesions and their clinical appearance.[6] They are type 1 (caused by animal hookworms), type 2 (human hookworms), type 3 (human strongyloides), type 4 (animal strongyloides), type 5 (*Gnathostoma*), and type 6 (insect larva).[6] CLM is usually caused by third stage larva (filariform larva) of dog and cat hookworms (*Ancylostoma-caninum* and *Ancylostomabrasiliensis*, respectively) and rarely by *Uncinariastenochepala*, *Bunostomumphlebotomun*, or the human larvae of *Necatoramericanus* and *Ancylostoma-duodenale*.[4 5]

Cutaneous larva migrans is usually self limiting but the symptoms (itching) and possible complications warrant treatment.[1] 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 metriphonate.[7] Though many types of treatment have been used, albendazole is considered to be the drug of choice.[8] Albendazole is used in the dosage of 400–800 mg/day for a period that may vary from 1–7 days.[9] Eradication of larva causing CLM is impractical, but avoiding contact with contaminated soil of beaches can prevent it.[1 2]

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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NOTICE

8th European Society of Contraception Congress

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