

# PostScript

## LETTERS

### Circumcision practice in the Philippines: community based study

Male circumcision is a well studied phenomenon. However, much of the published knowledge on circumcision is derived from highly industrialised Western countries, particularly the United States.<sup>1</sup> The non-Western context of circumcision is not well known despite being a universal practice in various countries. For example, in the Philippines, circumcision was common in the past as it is at present, being an integral aspect of the social organisation of the society.<sup>2,3</sup> This report offers a Philippine perspective of male circumcision, particularly its adoption and complications. The study employed semi-structured face to face interviews with 114 circumcised males conveniently recruited using a snowball technique from two communities. One fourth (22) of the clients were aged 13–18, while the rest were older, working in varied and low income occupations, and were single, married, or separated.

The majority of respondents (51.7%) were circumcised between ages 10 and 14. Others had the same experience before age 10 (42.1%) or between 15 and 18 (5.3%). Respondents gave several reasons for their circumcision: not wanting to be called "supot" or uncircumcised (66.7%); being at the right age (41.2%); and wanting to grow tall and physically fit (29.8%). Other reasons included the need to get rid of smegma in the penis (22.8%); to cause pregnancy (20.2%); and to obey parents (18.4%) (table 1). Seven of every 10 clients (68.4%) were circumcised by non-medical providers; the remaining three by medical providers. Respondents paid for their circumcision in cash (51.8%) or in kind (6.1%); more than a third (36%) said that they used the services at no cost but by courtesy of the community and extension services offered by some groups and individuals from or outside their neighbourhood.

Six of every 10 respondents (59.6% or 68 of 114) reported having post-circumcision penile complications (inflammation and

swelling), while four (40.4%) had none. Almost all (60 of 68) did not consult their circumcisers about their penile complications. The rest (n = 60) self medicated. The healing period was from less than 1 week to 2 months.

Circumcision among the low income respondents occurred at prepubescent ages. Ever since, the procedure has been regarded, along with corollary health reasons, as a rite of passage towards manhood.<sup>4</sup> Circumcision was pursued with broad community participation: parents, peers, women, and circumcisers assumed various roles in its adoption. Respondents' circumcisers included medical doctors and lay people in the community. The central role of lay individuals in undertaking circumcision is part of the traditional character of this community based practice.

Post-circumcision complications were limited to inflammation and swelling, consistent with Western data wherein risks are regarded as minor and complications were at a rate 0.2 to 0.6%.<sup>5,6</sup> Respondents did not take these complications nor the risks from circumcision seriously when they opted not to see their circumcisers and when they adopted self medication. The seeming lack of serious concern for these problems was inappropriate given that the healing period of the circumcised penis of many respondents was highly protracted. Much of the foregoing evidence on reasons for adopting circumcision highlights the fact that respondents' circumcision was predominantly traditional.

### Acknowledgements

The reported research was funded by a grant from the Ford Foundation/Jakarta through the Australian National University Demography Department (S4440125). I thank the team members—Loyd Norella, Bruce Ragas, Redentor Rola, Michael Sibbaluca and Christian Tena—for their research assistance.

R B Lee

De La Salle University, 2401 Taft Avenue, Manila, Philippines; leer@dlsu.edu.ph

doi: 10.1136/sti.2004.009993

Accepted for publication 13 March 2004

### References

- 1 Willis M. Genital mutilation: on perception, practice and policy. *J Sex Res* 2000;**37**:291–3.
- 2 Manuel E. *Manuvu social organization*. Quezon City, Philippines: University of the Philippines Press, 1973.
- 3 Morales D, Monan A. *Primer on the Negritos of the Philippines*. Manila, Philippines: Philippine Business for Social Progress, 1979.
- 4 Jacano FL. *The traditional world of Malitbog*. Quezon City, Philippines: University of the Philippines Press, 1969.
- 5 Gee WF, Ansell JS, Kaplan GW. Neonatal circumcision: a ten-year overview with comparison of Gomco clamp and Plastibell device. *Pediatrics* 1976;**58**:824–7.
- 6 Harkavy KL. The circumcision debate. *Pediatrics* 1987;**79**:649–50.

### Repeated detection of lymphogranuloma venereum caused by *Chlamydia trachomatis* L2 in homosexual men in Hamburg

Bacteria of the species *Chlamydia trachomatis* are divided into serovars that are associated with different disease manifestations. Serovars A-C cause trachoma, which occurs mainly in undeveloped countries. Serovars D-K are responsible for oculogenital infections, and serovars L1, L2, and L3 cause lymphogranuloma venereum (LGV). Infections of serovars A-K are usually confined to the mucosal epithelia of the eyes and the anogenital tract. In contrast, the L-serovars are more invasive and may induce genital ulcer or inguinal lymphadenopathy after passing the epithelial surface.<sup>1</sup>

While serovars D-K are distributed worldwide and represent the most frequent bacterial sexually transmitted disease in Europe and North America, LGV caused by the L-serovars is a very rare disease in industrialised countries, but is restricted to parts of southeast Asia, Africa, South America, and the Caribbean.<sup>2</sup>

During the second part of 2003 three patients presented to our clinic with inguinal swellings. In addition, genital ulcer developed in two of them. All patients had homosexual contacts with more than one partner. Two patients were HIV positive, one of them refused HIV testing. The patients assured us they had not travelled outside Germany during the past year.

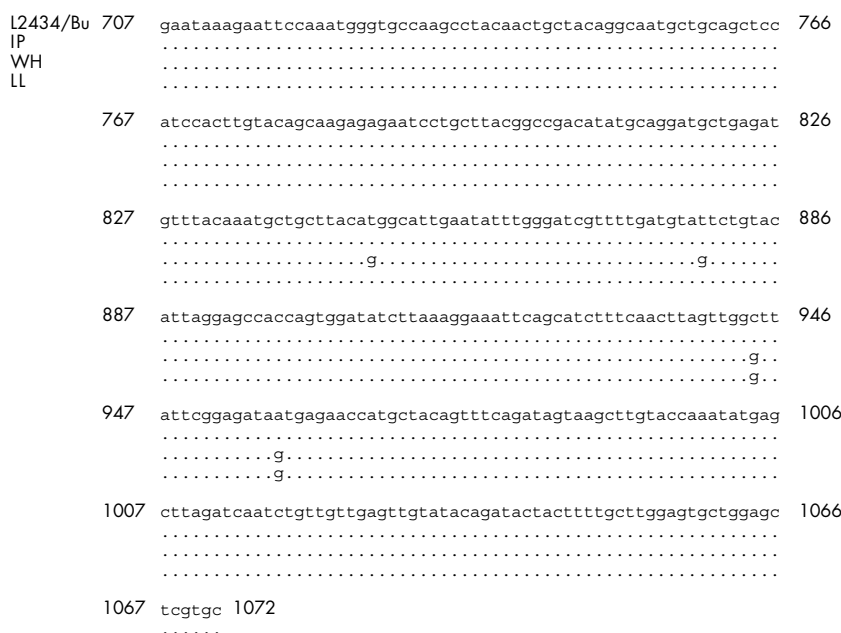
In all cases genital *C trachomatis* infection was diagnosed by DNA amplification in lesional swabs or lymph node aspirates using the SDA technology (ProbeTec ET, Becton-Dickinson, MD). Other infections inducing genital lesions were not detected. None of the patients had a positive serology indicating active infection with *Treponema pallidum*. Genital infections due to *Neisseria gonorrhoeae*, *Haemophilus ducreyi*, and herpes simplex virus were excluded by polymerase chain reaction (PCR) testing. In addition, no genital bacterial and fungal pathogens were detectable by direct microscopy or culture.

After treatment with doxycycline (200 mg per day), genital lesions completely regressed in all patients. Patients 2 and 3 were treated

**Table 1** Clients' reasons why they underwent circumcision\*

Responses	No	%
1 To avoid being called "supot" or uncircumcised	76	66.7
2 Already a grown up, of the right age—part of the tradition to undergo circumcision	47	41.2
3 To grow tall and physically fit	34	29.8
4 Wanted his penis to be free of smegma	26	22.8
5 To be able to cause pregnancy; wanted to have a child of his own	23	20.2
6 Parents told him to undergo the procedure	21	18.4
7 To court a girl, have a girlfriend and get married	14	12.3
8 Women like to have sexual intercourse with a man whose penis is circumcised	12	10.5
9 To facilitate entry of his penis during sexual intercourse	7	6.1
10 To enhance the form of his penis and to make his glans larger	7	6.1
11 It is in the Bible that a Christian must be circumcised	4	3.5
12 To become intelligent	3	2.6
13 Circumcision was free	2	1.8

\*Multiple response (n = 114).



**Figure 1** DNA sequence alignment of MOMP-PCR fragments. Nucleotide numbers are according to *C. trachomatis* L2 strain 434/Bu (Genbank Acc No M14738). IP, WH, and LL are the initials of the patients who were *C. trachomatis* positive. Homology to 434/Bu is 100% (IP), 98.9% (WH), and 99.5% (LL), respectively.

for 3 weeks, while patient 1 received doxycycline for 1 week only.

The underlying *C. trachomatis* serovars were identified by sequence analysis of ompA derived DNA fragments amplified using primers MF21 and MB22 as described by Dean *et al.*<sup>3</sup> In all cases the sequences obtained had highest homology to *C. trachomatis* serovar L2 but were not identical. While the sequence from patient 1 was shown to be 100% identical to the L2 isolate 434/Bu<sup>4</sup> over the analysed region of 366 nucleotides, the sequences of patients 2 and 3 were only 89.9% and 99.5% homologous, indicating different sources of infection (fig 1).

Recently, a cluster of 15 LGV cases among homosexual men was reported in Rotterdam.<sup>5</sup> Thirteen of these patients were HIV positive. As with our patients, *C. trachomatis* serovar L2 was identified in all patients. Although anonymous sexual contacts in Germany were reported, there is yet no epidemiological evidence for a connection of the LGV cases of our study and those reported in Rotterdam.

In conclusion, infections with *C. trachomatis* serovar L may be more frequent than assumed previously, as indicated by the identification of three different strains in our study. Consequently, LGV should be included in the differential diagnosis of genital ulcer or lymphadenopathy in homosexual HIV infected patients in Europe.

**T Meyer, R Arndt**

Institute of Immunology, Pathology and Molecular Biology, Hamburg, Germany

**A von Krosigk, A Plettenberg**

Institute of Interdisciplinary Infectiology and Immunology, St Georg Hospital, Hamburg, Germany

Correspondence to: Thomas Meyer, PhD, Institute of Immunology, clinical Pathology and Molecular

Medicine, Lademannbogen 61, 22339 Hamburg, Germany; meyer@labor-arndt-partner.de

doi: 10.1136/sti.2004.012617

Accepted for publication 22 July 2004

## References

- Mabey D, Peeling RW. Lymphogranuloma venereum. *Sex Transm Infect* 2002;**78**:90–2.
- Black CM. Current methods of laboratory diagnosis of Chlamydia trachomatis infections. *Clin Microbiol Rev* 1997;**10**:160–84.
- Dean D, Stephens RS. Identification of individual genotypes of Chlamydia trachomatis from experimentally mixed serovars and mixed infections among trachoma patients. *J Clin Microbiol* 1994;**32**:1506–10.
- Stephens RS, Mullenbach G, Sanchez-Pescador S, *et al.* Sequence analysis of the major outer membrane protein gene from Chlamydia trachomatis serovar L2. *J Bacteriol* 1986;**168**:1277–82.
- Gotz HM, Ossewaarde JM, Nieuwenhuis RF, *et al.* A cluster of lymphogranuloma venereum among homosexual men in Rotterdam with implications for other countries in western Europe. *Ned Tijdschr Geneesk* 2004;**148**:441–2.

## Determinants of hospital mortality of HIV infected patients from north India

A majority of the HIV infected population lives in developing nations. Most patients require hospitalisation for management of opportunistic infections (OIs) sometime during the course of their illness. Locally endemic infections and underlying malnutrition tend to influence the manifestations and course of the disease.<sup>1</sup> However, there is paucity of data on pattern of disease and determinants of immediate outcome of such patients from Indian subcontinent.<sup>2</sup>

We report the determinants of hospital mortality in a cohort of 135 consecutive cases of HIV/AIDS, aged 13 years and above, admitted to the All India Institute of Medical Sciences (AIIMS), New Delhi, during the period of January 2000 through July 2003. These patients had been hospitalised for suspected OIs, and all patients underwent examination for diagnosis with subsequent management as per standard guidelines. For patients with *Pneumocystis jiroveci* pneumonia (PCP) whenever hypoxaemia was severe ( $\text{PaO}_2 < 70$  mm Hg;  $n = 5$ ), corticosteroids were given in addition to oral co-trimoxazole. None of these patients received assisted ventilation. Secondary prophylaxis for the OIs was initiated as recommended.<sup>3</sup>

Mean age of the patients was 34 (SD 10) years and 23 patients (17%) were women. CD4+ cell counts were done in 109 patients. Most of these patients (82.6%) had CD4+ counts less than 200 cells  $\times 10^6/l$ . Fifty patients (46%) had CD4+ counts less than 50 cells  $\times 10^6/l$ . The mean number of OI was 1.4 per patient. The commonest OI was tuberculosis (TB) (71.1%), followed by oral candidiasis (39.3%). Other OIs (full data presented elsewhere) included PCP ( $n = 10$ ), cryptococcal meningitis ( $n = 8$ ), cerebral toxoplasmosis ( $n = 5$ ), cytomegalovirus retinitis ( $n = 3$ ), visceral leishmaniasis ( $n = 2$ ), and progressive multifocal leucoencephalopathy ( $n = 1$ ).

Twenty one patients (15.6%) died in hospital, most of them as a result of TB ( $n = 16$ ; 76.2%) and PCP ( $n = 4$ ; 19%). Factors associated with hospital mortality, on bivariate analysis, are shown in table 1. After adjusting for other factors (by multivariate logistic regression analysis), PCP was the only independent determinant and was associated with a more than fourfold increased risk of hospital mortality (adjusted odds ratio (95% CI): 4.7 (1.1 to 20.9);  $p = 0.041$ ).

Overall hospital mortality of 15.6% in this cohort is considerable and reflects the advanced nature of the disease at presentation. As our institute is a tertiary care facility

**Table 1** Predictors of in-hospital mortality in 135 HIV infected patients

Variable	Survived (n = 114)	Died (n = 21)	p Value
MMSE score*	30 (23–30)	5 (0–30)	0.001
Blood urea (mg/dl)†	29 (16)	41 (35)	0.051
CD4+ count ( $\times 10^6/l$ )*	62 (9–152)	38 (7–111)	0.029
Pericardial effusion‡	0.8%	9.5%	0.051
ATT‡	63%	80%	0.033
PCP‡	5.3%	19%	0.004

MMSE, Mini Mental Status Examination; ATT, antituberculosis treatment; PCP, *Pneumocystis jiroveci* pneumonia.

\*Data are presented as median (interquartile range); p values determined by Mann-Whitney U test.

†Data are presented as mean (SD); p value determined by independent t test.

‡Data are expressed as proportion; p values determined by  $\chi^2$  test.

and a national referral centre, this is expected. None the less, it may be possible that some OIs remained undiagnosed and indirectly influenced the outcome. This does occur as was shown in a necropsy study where it was found that a large number of potentially fatal OIs were not diagnosed antemortem.<sup>4</sup>

Unexpectedly, CD4+ counts had no independent effect on mortality. A similar observation has been reported in some previous studies.<sup>5,6</sup> It appears that the virulence of the pathogen causing the OI, rather than the stage of the underlying disease, tends to influence the short term outcome. This finding has important therapeutic implications, especially because almost all these patients die of an OI.

It is suggested that any HIV infected patients with an OI, irrespective of the stage of the disease, should be managed with an aggressive approach. Once they recover from the OI, they can be offered antiretroviral therapy, which, over the years, has become extremely potent and effective. Such an approach is likely to improve the long term outcome of these patients.

**S K Sharma, T Kadiravan, A Banga, I Bhatia, T Goyal, P K Saha**  
Department of Medicine, All India Institute of Medical Sciences, New Delhi, India

Correspondence to: Dr S K Sharma, Department of Medicine, Division of Pulmonary and Critical Care Medicine, All India Institute of Medical Sciences, New Delhi-110029, India; sksharma@aiims.ac.in

doi: 10.1136/sti.2004.009241

Accepted for publication 18 March 2004

## References

- 1 **Chacko S**, John TJ, Babu PG, *et al.* Clinical profile of AIDS in India: a review of 61 cases. *J Assoc Phys India* 1995;**43**:535–8.
- 2 **Kumarasamy N**, Solomon S, Flanigan TP, *et al.* Natural history of human immunodeficiency virus disease in southern India. *Clin Infect Dis* 2003;**36**:79–85.
- 3 **USPHS/IDSA Prevention of Opportunistic Infections Working Group.** USPHS/IDSA guidelines for the prevention of opportunistic infections in persons infected with human immunodeficiency virus. *Ann Intern Med* 1997;**127**:922–46.
- 4 **Mohar A**, Romo J, Salido F, *et al.* The clinical and pathological manifestations of AIDS in a consecutive series of autopsied patients in Mexico. *AIDS* 1992;**6**:467–73.
- 5 **Casalino E**, Mendoza-Sassi G, Wolff M, *et al.* Predictors of short- and long-term survival in HIV-infected patients admitted to the ICU. *Chest* 1998;**113**:421–9.
- 6 **Nickas G**, Wachter RM. Outcomes of intensive care for patients with human immunodeficiency virus infection. *Arch Intern Med* 2000;**160**:541–7.

## STI services in the United Kingdom, how shall we cope?

The recent proposals/debate addressing the increasing genitourinary medicine (GUM) workload<sup>1</sup> are imaginative. I wish to contribute the following observations.

(1) The listed “guiding principles” for the GUM services role are missing the most important function that is expected by patients: to exclude sexually transmitted infections. Casual sex, contact tracing, and sexual assault are examples of conditions that require full assessment.

(2) The revelation that some 9% of the sexually active population are harbouring

asymptomatic chlamydial<sup>2</sup> infection presents GUM physicians with a professional responsibility. Chlamydia screening will require extensive resources from primary care.<sup>3</sup>

(3) The debate ignores the issue of funding. To assume that GPs are going to provide “additional services” for a lower cost than GUM clinics, with their existing infrastructure, contradicts the basis of health care economics.<sup>4</sup>

(4) The relation between quantity and quality of health care is inverse; with both healthcare workers and clients appreciative of this relation. The pressures for quantity will eventually force the quality of care downhill.<sup>5</sup>

(5) Clinical governance implicates clinicians (as providers and stakeholders) in the quality of their provisions of services. It would be professionally unwise to compromise on quality as a result of the static, or a relative decrease in, funding. It is professionally unacceptable and could prove medicolegally indefensible.<sup>6</sup>

(6) The open access of the GUM clinics will always attract patients, and the free prescriptions will continue to influence demand (particularly with recurrent infections).

(7) There is a potential of primary care’s initial enthusiasm to fade away, with patients re-diverted to GUM clinics, while resources are tracking in the other direction.

(8) The provisions of service should be based primarily on clinical needs, with a clearer understanding of the difference between screening and testing. The task of providing screening (for example, for chlamydia) in primary care (leading to the cascade of recall of positive cases, the treatment of patients’ conditions, and the referral for contact tracing) should be implemented fully in primary care, before any other directives.

(9) Primary care units, providing full testing for STIs, should follow the same clinical governance and quality assurance standards expected and provided in GUM clinics. The issues of access, confidentiality, free prescriptions and reporting conditions (coding: KC60) have not been addressed yet in primary care settings.

I propose the following alternative models of service.

(1) “Three tiered” GUM services are provided, within existing GUM departments, where care is streamlined with defined “clinical care pathways.”

(a) The first tier/setting of service could be provided by nurses and/or junior doctors (under the supervision and support of senior GUM physicians). It will triage patients and deal with primary care conditions.

(b) The secondary tier/setting would deal with clinical conditions of intermediate complexity (that prove to be outside the expertise of the first setting). It will be provided by medical staff, of intermediate seniority, supported by senior/specialised nurses.

(c) The tertiary tier/setting is already existing within most GUM services (for example, HIV, sexual dysfunction, genital dermatosis, forensic genitourinary medicine). It will be provided by specialised medical staff, assisted by specialised nurses, where junior grades attend for training.

(2) A “three sessions” day could be provided, to maximise the use of accommodation and

infrastructure resources. Evening and/or weekend clinics to be considered—with appropriate funding.

(3) The provision of satellite GUM clinics where local services are unable to cope with demands. They could be provided (and supported) by existing larger primary care, GPs and/or family planning units, under the auspices of the main GUM clinic. This will maintain and ensure quality, KC60 reporting, confidentiality, and/or free prescribing.

These modules are already taking shape in some GUM departments.

Correspondence to: Dr A R Markos, Department of Genito-Urinary Medicine, Mid Staffordshire General Hospitals, NHS Trust, Staffordshire General Hospital, Weston Road, Stafford ST16 3SA, UK; stephanie.thorpe@msg-h-tr.wmids.nhs.uk

doi: 10.1136/sti.2004.009829

Accepted for publication 19 March 2004

## References

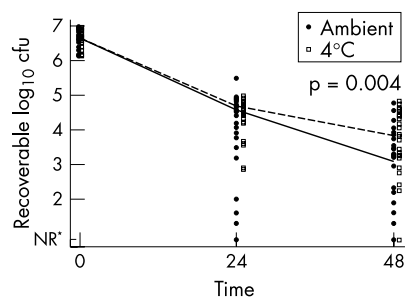
- 1 **Bradbeer C**, Mears A. STI services in the United Kingdom, how shall we cope? *Sex Transm Infect* 2003;**79**:435–8.
- 2 **Underhill G**, Hewitt G, McLean L, *et al.* Who has chlamydia? The prevalence of genital tract chlamydia trachomatis within Portsmouth and South East Hampshire, UK. *Fam Plann Reprod Health Care* 2003;**29**:17–20.
- 3 **Pimenta JM**, Catchpole M, Rogers PA, *et al.* Opportunistic screening for genital chlamydial infection. II: prevalence among healthcare attenders, outcome, and evaluation of positive cases. *Sex Transm Infect* 2003;**79**:22–7.
- 4 **World Health Organization.** *European observatory on healthcare systems: financial resource allocation, in healthcare systems in transition: United Kingdom.* Copenhagen: WHO Publications, 1999.
- 5 **Saltman RB**, Figueras J. Confronting resource scarcity. In: *European healthcare reform.* Copenhagen: WHO Publications, 1997.
- 6 **Ferguson AL.** Legal implications of clinical governance. In: Lugin M, Secker-Walker J, eds. *Clinical governance.* London: Royal Society of Medicine Press, 2001.

## Refrigeration does not compromise recovery of *Neisseria gonorrhoeae* from charcoal transport swabs

Despite emergent molecular diagnostics, culture recovery of *Neisseria gonorrhoeae* (NG) remains important for the diagnosis of gonorrhoea, as well as for susceptibility and epidemiological study. Although inoculation of bacteriological media in clinic is optimal, it can prove impractical, or impossible, in some healthcare settings. Further, any healthcare strategy that distances patient testing from diagnostic laboratories reinforces the need for transport media.

Many users assume that commercial transport systems offer comparable performance characteristics, so cost alone may influence choice. However, a proposed NCLS standard for transport media (M40)<sup>1</sup> is likely to confirm significant variations in performance, both between and within different manufacturers’ products. Similarly, little attention has been given to the storage temperature for swabs after use; textbooks offer conflicting recommendations. Overgrowth and killing of NG in transport media by contaminating bacteria may be inhibited by refrigeration, but it is unclear whether refrigeration is detrimental to recovery of NG.





**Figure 1** Recovery of 30 distinguishable strains of *Neisseria gonorrhoeae* from charcoal transport medium stored at ambient temperature or 4°C. \*NR, none recovered ( $\leq 0.82$ ).

To address this we compared the survival of 30 distinguishable clinical strains of NG in charcoal transport swabs held at ambient temperature (AT: 20–22°C) and at 4°C.

Swabs (Transwab; Medical Wire & Equipment Co) were inoculated with a suspension of NG in phosphate buffered saline (PBS). For each strain, four swabs were inoculated, to allow comparison of storage at AT or 4°C, for 24 or 48 hours. At times 24 hours and 48 hours, NG organisms were recovered from swabs by vortexing the tips in 1 ml PBS. Triplicate counts were performed on the 0 hour inocula and the washings on chocolate agar (Oxoid, Basingstoke, UK) using a spiral plater (Don Whitley, Shipley, UK). The median value for each triplicate was taken, and counts compared using the Wilcoxon rank sum test.

At 24 hours there was no significant difference between AT and 4°C counts, with median (interquartile range, IQR) recoverable  $\log_{10}$ cfu of 4.57 (3.78–4.84) and 4.72 (4.32–4.87), respectively (fig 1). At 24 hours one strain held at AT was not recovered (see fig 1). At 48 hours, six strains held at AT and three at 4°C were not recovered; median counts (IQR) were 3.09 (1.3–3.55) and 3.855 (3.19–4.53) for AT and 4°C, respectively ( $p = 0.004$ ).

Sng *et al* in a semiquantitative study tested five strains in Amies medium at four temperatures (4, 18, 26, and 32°C) and found better survival at lower temperatures.<sup>2</sup> Arbique *et al* studied six isolates and found refrigeration improved recovery, though optimum temperature varied with system.<sup>3</sup> Perry *et al*<sup>4</sup> using 11 isolates considered that 4°C prolonged survival. Studies using laboratory control strains of NG have usually shown better recovery at 4°C.<sup>5,6</sup>

It is impossible to reproduce in vitro the NG inoculum and other conditions in clinical swabs. To demonstrate a difference in survival at two temperatures we used a standardised inoculum higher than that likely to be present in clinical samples. Nevertheless, our results add to a growing body of evidence that, compared to AT, refrigeration does not compromise the recovery of NG. Storage at 4°C offers the potential benefit of reducing overgrowth and elimination of NG by contaminating normal flora.

J J Wade, M A Graver

Health Protection Agency London, Medical Microbiology, King's College Hospital, Denmark Hill, London SE5 9RS, UK

Correspondence to: Dr Jeremy Wade, Health Protection Agency London, Medical Microbiology,

**Table 1** Chlamydia prevalence by age in men attending GUM clinic and undergoing community based testing

Age groups	Postal testing	GUM 2002	GUM 2003
<15	6.7% (1/15)	16.7% (1/6)	0.0% (0/7)
15–19	13.7% (57/416)	14.2% (50/351)	19.4% (74/382)
20–24	12.6% (42/334)	17.4% (208/1194)	16.7% (217/1299)
25–29	12.0% (14/117)	13.0% (128/981)	11.3% (108/953)
>29	1.4% (1/70)	6.7% (116/1725)	6.3% (101/1598)
Total	12.0% (115/952)	11.8% (504/4258)	11.8% (500/4239)

King's College Hospital, Denmark Hill, London SE5 9RS, UK; jim.wade@kingsch.nhs.uk

doi: 10.1136/sti.2004.010561

Accepted for publication 26 March 2004

## References

- www.nccls.org.
- Sng E, Rajan VS, Yeo K, *et al*. The recovery of *Neisseria gonorrhoeae* from clinical specimens: effects of different temperatures, transport times, and media. *Sex Transm Dis* 1982;**9**:74–8.
- Arbique JC, Forward KR, LeBlanc J. Evaluation of four commercial transport media for the survival of *Neisseria gonorrhoeae*. *Diagn Microbiol Infect Dis* 2000;**36**:163–8.
- Perry JL. Effects of temperature on fastidious organism viability during swab transport. Orlando, FL, USA: Proceedings of the 101st American Society for Microbiology General Meeting, May 2001:20–4.
- Robinson A, Gruber ML. Comparison of bacterial survival in two transport systems stored at room and refrigerator temperatures. Salt Lake City, UT, USA: Proceedings of the 102nd American Society for Microbiology General Meeting, May 2002:19–23.
- Schieven BC, Farrell D. Evaluation of two transport systems for recovery of selective facultative bacteria. Orlando, FL, USA: Proceedings of the 101st American Society for Microbiology General Meeting, May 2001:20–4.

## Chlamydia in heterosexual men: could peak prevalence be in teenagers?

The CMO's expert advisory group on *Chlamydia trachomatis*<sup>1</sup> and the Health Protection Agency (HPA)<sup>2</sup> both state that rates of chlamydial infection are highest among 16–19 year old females and 20–24 year old males. Staff based in the genitourinary medicine (GUM) department in Edinburgh have set up a number of community based initiatives, including a postal testing service, to improve access to chlamydia diagnosis for young people aged less than 25. Many of these initiatives have been targeted specifically at young men, with testing having been made available in a variety of novel settings such as young people's sexual health and drop-in clinics, further education (FE) colleges, community pharmacies, sports centres, and a high street shop selling CDs. The work forms part of a demonstration project called Healthy Respect that is funded by the Scottish Executive with the aim of helping young people in Lothian develop a positive attitude to their own sexuality and that of others. The long term goal of the project is to reduce teenage pregnancies and sexually transmitted infections.

Between February 2002 and December 2003, as part of the Healthy Respect project, we carried out 4838 chlamydia tests including 2321 from postal testing kits. The overall

prevalence of chlamydial infection was 9.5% (10.4% in men, 9.0% in women). Somewhat to our surprise, the 15–19 year old age group showed peak prevalence in men as well as in women.

We compared this with the prevalence by age in men attending Edinburgh GUM (see table 1), anticipating this would be highest in the 20–24 year old age group. Although this was the case for 2002, in 2003 the peak prevalence was in 15–19 year olds, with the proportion of all positive tests in men as a result of the under 20s increasing significantly from 10.1% (51/504) in 2002 to 14.8% (74/500) in 2003 ( $\chi^2$  5.05;  $p = 0.025$ ).

There is no doubt that in men, the age group 20–24 accounts for the highest number of cases diagnosed, but our data raise the possibility that either there has been under-diagnosis of cases in younger men or that there is a trend towards younger transmission. Although we only report on 2 years' data, it will be essential to monitor ensuing trends by concentrating efforts to include teenage men in chlamydia testing programmes.

H Young, K Allison, K Carrick-Anderson, L McKay, G Scott

Genitourinary Medicine Department, Lauriston Building, Lauriston Place, Edinburgh EH3 9HA, UK

Correspondence to: Dr Gordon Scott, Genitourinary Medicine Department, Lauriston Building, Lauriston Place, Edinburgh EH3 9HA, UK; gordon.scott@luht.scot.nhs.uk

doi: 10.1136/sti.2004.010876

Accepted for publication 17 July 2004

## References

- Department of Health. CMO's expert advisory group on *Chlamydia trachomatis*. London: DoH, 1998.
- Health Protection Agency. Available at [www.hpa.org.uk/infections/topics\\_az/hiv\\_and\\_sti/sti-chlamydia/epidemiology/epidemiology.htm](http://www.hpa.org.uk/infections/topics_az/hiv_and_sti/sti-chlamydia/epidemiology/epidemiology.htm).

## CORRECTIONS

doi: 10.1136/sti.2003.007682

doi: 10.1136/sti.2003.008367

In two letters published in the June 2004 issue of STI the author list was printed in the incorrect order (F Burns, C H Mercer, D Mercey, S T Sadiq, B Curran, P Kell. Barriers to HIV testing: a survey of GUM clinic attendees. *Sex Transm Infect* 2004;**80**: 247–248. F Burns, C H Mercer, D Mercey, S T Sadiq, B Curran, P Kell. Factors that may increase HIV testing uptake in those who decline to test. *Sex Transm Infect* 2004;**80**: 249). S T Sadiq should be the last author for both letters.