HIV tests in young adolescents attending a GUM clinic

A pretest counselling session is recommended by the General Medical Council before carrying out an HIV test and it is generally accepted that adolescents deemed competent enough to understand the counselling process can have an HIV test without parental consent. A recent survey in the United Kingdom showed that 79% of clinics were prepared to test for HIV infection in children under the age of 16. We reviewed the characteristics of adolescents between the ages of 13 and 16 seen in the Coventry genitourinary medicine (GUM) clinic for an HIV test between 1990 and 2000 (table 1). This was part of a larger review of GUM attendances by children, the results of which have been published.1 The commonest mode of presentation was a specific request for an HIV test. This was the case in 32 (39.0%) adolescents. Eighteen adolescents (22.0%) coming in requesting a check for HIV infection were not significantly associated with voluntary HIV testing. Having had more than one sexual partner in the past year and discussing HIV/AIDS with a doctor were however associated with voluntary HIV testing.

It has been shown that most adolescents engaging in high or moderate HIV risk behaviour continued to do so into young adulthood. Knowledge about HIV infection and its prevention, estimates of personal risk or exposure to HIV testing were not associated with having discussed HIV with a teacher are also associated with voluntary HIV testing.1

Effort must therefore be directed at research into adolescent risk behaviour change.

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Table 1 Demographics

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>Females</th>
<th>Accepting to have HIV test</th>
<th>Median age</th>
<th>Virgins</th>
<th>Prostitutes</th>
<th>Injecting drug users</th>
<th>Positive for HIV antibodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>82</td>
<td>74 (85.4%)</td>
<td>70 (85.4%)</td>
<td>15</td>
<td>8 (9.8%)</td>
<td>3 (3.7%)</td>
<td>3 (3.7%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Sexual and reproductive health among female adolescents: preliminary results

The recognition of adolescence as an essential formative stage of life has implications for programming content and approaches. Young people have to be treated as people in their own right, and their individual needs considered on a case to case basis. The realisation that this is a time of significant change and risk highlights the urgency to deal directly with sensitive topics such as sex and drugs.2

The aim of this study was to identify demographic, behavioural and clinical factors for STI and unplanned pregnancy among female adolescents assisted by the family health programme (PSF) of Vitória Municipality in Brazil. A cross-sectional study was performed among female adolescents (15–19 years old) assisted by the PSF. Participants were screened for Chlamydia trachomatis and Neisseria gonorrhoeae using ligase chain reaction (LCR) applied to urine and answered a face to face questionnaire. Standard descriptive statistical analysis was performed. Prevalence rates were calculated to reflect the relative frequency of each disease with corresponding 95% confidence intervals (CI). The national school of public health (FIOCRUZ) ethics committee approved this study. Written, informed consent was obtained by all participants and their parents. The study included 149 adolescents. Mean age was 17.2 (SD 1.5) years; mean education was 8.3 (SD 2.9) years of schooling, and the mean age of the first sexual intercourse was 15.4 (SD 1.6) years. Seventy per cent of adolescents have already had sexual intercourse. Among those the prevalence rate of CT was 11.4% (95% CI 7.6 to 14), 4.0% (95% CI 2.1 to 5.2) of GC. Behaviour and clinical data are reported in table 1. There was statistical significance between chlamydia infection and previous STI (OR = 20.1, 95% CI: 5.9 to 67.9); gonorrhoea and no condom use (OR = 1.2, 95% CI: 1.06 to 1.12); and gonorrhoea and alcohol abuse (OR = 1.3, 95% CI: 1.1 to 2.1). Clinical problems identified were genital ulcer 6.0%, dysuria 15.4%, inguinal lymphadenopathy 12.1%, vaginal bleeding 3.4%, and pelvic pain 0.7%

STIs deserve attention not only because of their high prevalence but also because they frequently go undetected and untreated, and often result in serious sequelae and association with HIV infection.3 High prevalence rates associated with high frequency of risk were observed in this ongoing study. These two factors identify female adolescents as an important group to target with STI including HIV prevention efforts.

These data are descriptive and need to be completed but they are in agreement with the last research about Brazilian sexuality. It was reported that adolescents have their first intercourse earlier than the older generation and the knowledge about STI/AIDS does not modify the exposition.4 Eighteen percent of adolescents in Brazil becomes pregnant at least once and 54.1% among the married ones use some method of contraception.6 The preliminary results suggest that humane, healthcare based, STI/HIV prevention services in the health family programme can be an acceptable intervention, as well as one that is highly targeted epidemiologically. Screening, treatment and prevention counselling, and support in communities should be considered.

References


Accepted for publication 5 July 2002.
and evaluated as a core component of STI/HIV prevention efforts in many or most places where STIs are public health problems.

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Accepted for publication 14 June 2002

LETTERS

Factors affecting co-infection with genital chlamydia and genital gonorrhoea in an urban genitourinary medicine clinic

Co-treatment for chlamydia is common practice when gonorrhoea is diagnosed in a UK genitourinary medicine setting. In Glasgow, the incidence of gonorrhoea across the city has tripled from 1995 to 2000.1 Given this rise, we investigated whether our practice of co-treatment was of continued benefit. We examined all patients presenting to the Glasgow Royal Infirmary Genitourinary Medicine (GUM) Service (including the Steve Retson Project service for gay men) between 1 April 1997 and 30 September 2000 who had genital gonorrhoea diagnosed on routine culture. We diagnosed genital chlamydia co-infection by ligase chain reaction (LCR) on first pass urine (for men) or endocervical swab (for women). We diagnosed gonorrhoea in 351 attenders (287 men, 64 women), of whom 86 (25%); 95% CI 20% to 29%) were co-infected. Co-infection was significantly more common in women than men (294/468 (64%) vs 57/287 (20%); p = 0.02). Homosexual or bisexual men were significantly less likely to be co-infected than heterosexual men (15/134 (11.0%) vs 42/153 (28%); p = 0.001). Co-infection became less common with increasing age (15–19 years 43%; 20–24 years 34%; > 24 years 18%; χ² for trend = 15.4; p < 0.0001) (see table w1 on STI website). Logistic regression modelling showed young age and female sex to be independent predictors of co-infection, while homo/bisexuality was protective (see table w2 on STI website).

We recommend continuing co-treatment for chlamydia in all women and heterosexual men presenting with gonorrhoea in our setting. However, in common with other recent findings co-infection with genital chlamydia is uncommon in male homosexual or bisexual attenders with genital gonorrhoea, and co-treatment may not be necessary in this group.

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References


Accepted for publication 21 May 2002

Screening for STIs in individuals with HIV infection

In Australia, Victoria has seen an increase in new HIV cases from 1999 to 2000, and this rise has been sustained in 2001. The rise primarily involves men who have sex with men (MSM), where rates of unprotected anal intercourse and bacterial sexually transmitted infections (STIs) have also increased.1 As bacterial STIs enhance HIV transmission,2 screening for asymptomatic infections may reduce the incidence of HIV.

A sexual health service in Melbourne reviewed medical records of MSM clients with HIV infection. This was conducted to determine how commonly STI screening of asymptomatic clients is performed and the proportion with bacterial STIs. At the sexual health clinic the records of MSM with HIV infection were collected on printed forms. At the Alfred hospital a pilot programme screening asymptomatic clients with HIV (n = 40) was undertaken in the outpatient department between 30 October 2001 and 4 December 2001.

Of the 66 sexual health clinic records fulfilling the criteria, 22 (33%) had screening for bacterial STIs, and eight were tested at all anatomical sites of infection (urethra, rectum, throat). Of the 22 tested, three (14%) tested positive for Neisseria gonorrhoeae (NG) by culture and/or Chlamydia trachomatis (CT) by ligase chain reaction (LCR). Three had rectal infection (NG = 2, CT = 3), two also had pharyngeal infection (NG = 2), and one also had urethral infection (CT = 1). At the Alfred Hospital 40 clients had swabs taken from all sites. Of these 40, eight (20%) HIV infected clients had rectal NG detected by polymerase chain reaction (PCR) with confirmatory assay. We identified a relatively high proportion of infections in those screened—11 positive of the 62 tested (18%, 95% CI 9% to 30%). These findings to do not mean that these individuals have been placing others at risk of HIV transmission. STIs may be acquired from unprotected sexual contact with other HIV infected individuals, or through sexual contact that is low risk for HIV transmission. Nevertheless, it would seem prudent to reduce the prevalence of STIs by making screening a routine part of the management of MSM. In the United States STI screening is recommended,3 and screening of MSM is also recommended in the draft “STI management guidelines for priority populations” from the Australasian College of Sexual Health Physicians (Chris Bourne, personal communication).

Contributors

The data extraction was carried out by all authors and analysed by NL and CF. The article was drafted by all authors and all have approved the final draft. The authors declare that they have no conflict of interest in connection with this paper.

The completion of medical record reviews, the analysis, and drafting of this letter did not involve funding.

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www.sextransinf.com
Four layer discontinuous gradient for HIV

Artificial immunisation using processed semen is a risk reduction option, if they want children, for serodiscordant couples in whom the man is HIV positive. The main aim of this study was to develop a single semen processing technique to reduce HIV transmission risks to HIV negative wives without infection and to obtain better quality sperm.

Methods

After ethics committee approval and written informed consent, normozoospermic semen was provided by two asymptomatic HIV carriers. Discontinuous four layer density gradient, whose fractions (Fr) were 1.065 (Fr 4), 1.085 (Fr 3), 1.110 (Fr 2), and 1.135 (Fr 1), was prepared with Puresperm. Semen washed with Hank’s solution was laid on this gradient and centrifuged at 400g for 30 minutes. The specimen of each fraction was extracted to determine sperm quality and to detect HIV RNA and proviral DNA using RT-PCR and PCR, respectively. Sperm characteristics and detection of HIV in each fraction

Table 1 Sperm characteristics and detection of HIV in each fraction

<table>
<thead>
<tr>
<th>Fr</th>
<th>Sperm collection rate (%)</th>
<th>Sperm motility rate (%)</th>
<th>HIV RNA</th>
<th>HIV DNA</th>
<th>HIV p24 antigen after cocultivation with each fraction and carrier’s PBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 (2)</td>
<td>55 (19)</td>
<td>negative</td>
<td>negative</td>
<td>positive</td>
</tr>
<tr>
<td>2</td>
<td>32 (9)</td>
<td>94 (4)</td>
<td>negative</td>
<td>negative</td>
<td>negative</td>
</tr>
<tr>
<td>3</td>
<td>19 (8)</td>
<td>57 (25)</td>
<td>negative</td>
<td>negative</td>
<td>negative</td>
</tr>
<tr>
<td>4</td>
<td>10 (4)</td>
<td>19 (11)</td>
<td>positive</td>
<td>positive</td>
<td>positive</td>
</tr>
</tbody>
</table>

PBL = peripheral blood lymphocytes.

Discussion

HIV discordant couples have a risk of transmission generally if they wish to have a baby. Semprini et al reported continuous gradient centrifugation followed by a swim up procedure, and Marina et al carried out a similar method but HIV was detected in 5.6% of 107 samples. However, the condition of the sperm, after these processes, was not always sufficient for intrauterine insemination.

We have developed a novel semen single processing technique to reduce HIV RNA and HIV proviral DNA to undetectable levels in the fraction whose sperm quality was higher than others. Furthermore, this fraction was confirmed to have no HIV infectivity in vitro. This method appears to be an attractive alternative for HIV discordant couples.

Contributors

KK and VA contributed to laboratory work; AV referred HIV positive volunteers.

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Erythema nodosum induced by chancroid

Erythema nodosum is a type of panniculitis which is often regarded as a complex reaction pattern to various aetiologic factors of infective and non-infective origin. Infective agents outnumber inflammatory causes and drugs in causation of erythema nodosum in the developing countries. Almost all the infective agents including aerobic and anaerobic bacteria, viruses, fungi, parasites and mycobacteria can induce eruption of erythema nodosum. Among sexually transmitted infections, lymphogranulomavirus venereum has been known to be associated with erythema nodosum not infrequently.

A 23 year old woman presented with genital ulcer disease and painful rash over the legs of 1 week’s duration. There was no history of trauma, fever, or drug intake. She had a single stable sex partner who was apparently unaffected. Examination revealed a single, 1–1.5 cm size, irregular tender ulcer on the right labia minora with undermined margins and bleeding on touch. The regional lymph nodes were firm, moderately enlarged, and tender. Speculum and vaginal examination was normal. Examination of the perianal region, perineum, and other mucosae was also normal.

Multiple tender, erythematous nodular subcutaneous lesions with dusky erythema were present over both shins, calves, and ankle joints. Investigations revealed a normal complete blood count, serum biochemistry, urinalysis and blood sugar. VDRL, HIV-1 ELISA, and HBsAg were negative. Dark ground illumination, smears, and cultures from the ulcer did not reveal aetiologic diagnosis. Histopathology from the ulcer was consistent with diagnosis of chancroid, but histopathology of leg lesions confirmed it to be sepal panniculitis consistent with a diagnosis of erythema nodosum. The ulcer was treated with erythromycin steatate 500mg 6 hourly for 7 days. The genital ulcer healed completely in 7–10 days but the lesions of erythema nodosum subsided completely in 5–7 days without any other treatment.

Erythema nodosum as a cutaneous reaction pattern was first observed by Willan in 1798. A female preponderance with a ratio of 3:1 is often observed in adults compared to an equal incidence at prepubertal age. Although the exact pathogenesis of erythema nodosum is not known, it has been regarded as a immune complex, deposition disease which prefers the richly vascularized areas on shins, calves, and ankles.

In the present patient the erythema nodosum and chancroid had a strong temporal correlation as erythema nodosum immediately followed the appearance of the chancroid and resolved completely with its resolution. Although erythema nodosum is known to be associated with innumerable infective agents, to the best of our knowledge chancroid leading to causation of erythema nodosum has not been observed before.
co-trimoxazole was suppressing the gonococcal infection without curing it. The failure to detect *N. gonorrhoeae* by PCR from the rectal specimen raises the possibility that cointoxazole may have eradicated a rectal infection in this case while only suppressing an extragonococcal manifestation.

It is now standard practice to stop PCP prophylaxis when CD4 counts rise above 200 × 10^9/l in patients taking antiretroviral therapy. This may in turn have an impact on both the transmission and the manifestations of gonorrhoea in these patients, perhaps even contributing to increases in gonorrhoea in HIV infected populations.

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Accepted for publication 14 June 2002

Uptake of HIV testing in patients with a confirmed sexually transmitted infection

UK seroprevalence rates indicate that up to 50% of HIV positive patients in genito-urinary medicine (GUM) clinics remain undiagnosed. HIV is mainly identified in high risk patient groups. Sexually transmitted infections other than HIV (STIs) have been shown to facilitate and be associated with enhanced HIV transmission. Risk assessment for HIV, therefore, should target patients with an STI or history of recurrent STIs as a high risk group.

Targeting these patients to test for HIV at the time of their first visit after their STI diagnosis, is important as it will lengthen the “diagnosis interval” of patients testing HIV positive thereby conferring a better outcome, with respect to HAART; identify patients with recent concurrent acquisition of HIV and a STI, entering a highly infective seroconversion phase; identify individuals with undiagnosed, established HIV infection and a newly acquired STI which promotes higher infectivity due to increased HIV viral shedding into genital secretions.

Our study analysed the uptake of HIV testing among attendees who had a genitourinary screen at St Thomas’s Hospital genitourinary medicine department between 1 and 31 December 1999.

It compared the uptake of HIV testing, either at the index visit in December or deferred to within the ensuing 3 months, between patients diagnosed with an STI (gonorrhoea, chlamydia, herpes simplex virus, and trichomoniasis (study group)) and patients receiving a negative STI screen (control group).

Of 318 attendees, 242 and 76 patients comprised the study and control groups respectively. Only 18% (59/318) of patients tested for HIV on the initial visit. Significantly fewer of the study group tested for HIV (14%) compared to the control group (33%) (p<0.01).

Of those who did not test for HIV, 11 and 4 patients deferred testing in the study and control groups respectively (table 1). However, none of the deferers or initial non-testers re-attended for HIV testing in the following 3 months.

In view of this unacceptably low rate of HIV testing, both overall and in those patients with a confirmed STI, the following interventions are now being introduced, aiming to improve these figures and comply with the sexual health strategy 2001 targets.

• An “opt out” policy of HIV testing
• Additional waiting room posters and a new patient information leaflet about HIV is given to all patients at registration to read while they wait to be seen explaining the natural history, treatments available, benefits of early diagnosis, and mechanisms of reducing transmission. This enhances patient education and may expedite consultation length and waiting times for patients with restricted “time off” and/or other more pertinent issues to discuss
• Pretest counselling is reserved for high risk groups instead of being required routinely
• Patients are able to obtain their HIV results indirectly, without the inconvenience of a direct consultation
• Patients with restricted “time off” and/or other more pertinent issues to discuss
• Education all GUM staff to encourage a high offer rate of HIV testing to all patients, especially targeting high risk patients, which incorporates those with a confirmed STI.
Contributors
SD, CAR, and DL designed the study; SD and DL gathered and statistically analysed the data; SD, DL, and CAR contributed to writing the paper. Conflict of interests: There were no conflicting interests and no costs incurred.

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References

Accepted for publication 4 July 2002

BOOK REVIEW


Not many books nowadays try to summarise the broad field of HIV and AIDS. This British Medical Bulletin does attempt to do that, in line with its usual approach to providing substantial coverage of health subjects, but with suitable depth as well as breadth. The last (and first) British Medical Bulletin on this subject was published in 1988. It covered quite similar topics, but the main change is the depth of knowledge.

Although the title of this volume reflects the general sense that the face of the pandemic has indeed changed in many ways—not least the global spread, and the impact of antiretroviral therapies where they are available—the overwhelming impression I had was how similar are the issues and perspectives it covers. This is partly a reflection of the extraordinary hothouse atmosphere of the early pioneering years, when we climbed the steep part of the learning curve with unparalleled speed. The subsequent years have been ones of consolidation, during which the detail has been explored and the basic ideas refined. This book reflects that, where the change in the face is in part a shift from an impressionistic image to a more fully representational portrait, evidently from the same original.

The chapters provide a balanced and compact, yet thorough, assessment of the main issues. The authors are active in the field; they have an appropriately British background for this series, yet their perspective is unequivocally global. The accounts are worthy, reliable, and authoritative. If this conveys the impression that they are rather dull to read, that was indeed my feeling. There was generally and disappointingly little sparkle or originality in the concepts or the writing. Where there was, it derived from a narrow focus on a small part of the canvas rather than any broader insight.

Who will use this volume? I would recommend it as a reliable and thorough review for a new entrant to the field. Those who work adjacent to it and who would like a compact, up to date summary would also be well served. Some of the chapters are an excellent springboard for detailed exploration of their topics. But those who already work on HIV/AIDS will find little to engage or excite them. They would probably feel, as I did, that the fascinating wider changes in the actual face of HIV/AIDS, which are palpable in their work, have scarcely been touched upon.

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NOTICES

International Herpes Alliance and International Herpes Management Forum

The International Herpes Alliance has introduced a website (www.herpesalliance.org) from which can be downloaded patient information leaflets. Its sister organisation the International Herpes Management Forum (website: www.ihmf.org) has launched new guidelines on the management of herpesvirus infections in pregnancy at the 9th International Congress on Infectious Disease (ICID) in Buenos Aires.

Pan-American Health Organization, regional office of the World Health Organization

A catalogue of publications is available online (www.paho.org). The monthly journal of PAHO, the Pan American Journal of Public Health, is also available (subscriptions: pubsvc@tsp.sheridan.com).

26th National Conference of the Indian Association for the Study of Sexually Transmitted Diseases & AIDS

18–20 October 2002, All India Institute of Medical Sciences, New Delhi, India

The last date for submission of abstracts for free papers is 1 September 2002. The registration fees for foreign delegates is $50 (SAARC countries) and $100 (other countries).

Further details: Indian Association for the Study of Sexually Transmitted Diseases & AIDS (fax: 091 011 686 2663; email: iassid2002@sfy.com)

European Society for Gynaecological Endoscopy

Expert Meeting on Pelvic Floor Disorders

28–30 November 2002, Centro Médico Teknon, Barcelona, Spain

Further details: ESGE central office, Orga- Med, Essenstraat 77, B-1740 Ternat, Belgium (tel: +32 2582 0852; fax: +32 2582 1515; email: orgamed@village.uunet.be; web site: www.ESGE.org).

Royal Society of Medicine Conference on Men’s Sexual Health

13 December 2002, The Royal Society of Medicine, 1 Wimpole Street, London, W1G OAE, UK

Is Viagra really the answer to impotence, or are men and their doctors relying on prescription pills and avoiding tackling the psychological causes behind the problem? Besides impotence and other sexual dysfunction, this meeting also looks a range of male sexual problems from STDs to prostate cancer, the effect of sex on the heart to the male menopause. Registration costs: Fellow: £105; Non-Fellow: £175; Student: £20. CPD: 5 credits; PG EA Applied For.

Further details: Ms Georgina Brodie, RSM Administration (tel: +44 (0) 20 7290 3856; fax: +44 (0) 20 7290 2977; email: georgina.brodie@rsm.ac.uk).

XIX International Congress of the Society of The Fetus as a Patient

1–4 May 2003, Gran Hotel Sitges, Barcelona-Sitges, Spain

Further details: (fax: +34 93 418 7832; email: bcn2003@iudecesus.uab.es).