LETTERS TO THE EDITOR

Lymphatic filariasis—lest we forget

EDITOR,—Lymphatic filariasis is character-
ised by a wide range of clinical manifesta-
tions. In a non-endemic area the diagnosis may
be missed unless the index of suspicion is
high. An 18 year old sexually active male
presented with a progressively increasing
painless nodular swelling in the right ingu-
inal region of 4 months’ duration. The patient
had an unprotected vaginal contact with a
commercial sex worker 6 months earlier.
There was no history of genital ulcer or
urethral discharge. The general health of
the patient was preserved. Examination revealed
enlarged right inguinal and external iliac
lymph nodes, 1–3 cm in size, firm, mobile,
non-tender, and matted with normal overly-
ing skin. Examination of genital, anal, and
buccal mucosae was normal. There was no
other lymphadenopathy. A differential diag-
nosis of lymphogranuloma venereum (LVG)
and tuberculosis lymphadenitis was consid-
ered. Complete blood count revealed mild
leucocytosis and eosinophilia. Renal and
hepatic functions, urinalysis, and chest
radiograph were normal. Mantoux test and
VDRL were negative. A complement fixation
test for chlamydia group specific antibody was
negative. Fine needle aspiration cytology
from the nodes revealed reactive hyperplasia
which does not suppurate in two thirds of
cases.

In view of a history of sexual contact,
the authors describe participation rates
in a multiethnic neighbourhood, half of the
population having a Surinam-Anthill back-
ground, C trachomatis prevalence was 25%.

The question is not whether non-accept-
able home screening is for the youngest age
group, who might be most at risk, but also
how acceptable home testing is for people
with different ethnic backgrounds and people
living in low socioeconomic status and high
risk environments.

We piloted a pharmacy assisted approach
offering urine home testing to all sexually
active women age 15–30 years who came to
our pharmacy to collect their contraceptives.
Since the start 4 months ago 189 people
received an information leaflet and home test
package together with their contraceptives.
Fifty nine participated and sent their urine;
four were positive (6.7%). The participation
rate was 31%, lower than the reported rate for
women in the article of Stephenson et al.

The assumption by the authors that people
who do not participate for home testing will
turn up for opportunistic screening at the
general practice is, however, merely a hypoth-
osis, and not a strong one, especially not for
boys and men.

Tackling issues like risk perception and risk
environment and changing healthcare seek-
ing behaviours is not an easy task. Moreover,
a community based C trachomatis prevention
programme will require not only second-
ary prevention by active case finding but also
primary prevention. What is needed is an
integrated set of strategies, which are mutu-
ally reinforcing and that are age, sex, culture,
and context specific. Quite a challenge!

I A M VAN BERGEN
Netherlands’ Foundation for STD control,
PO Box 8198 5303 RD, Utrecht, Netherlands
vanbergen@sea.nl

Acceptability of home screening for
chlamydial infection: some remaining
issues

EDITOR,—In the recent article by Stephenson
et al the authors describe participation rates
of 39% for women and 46% for men for
home screening and comment: that this
might form a useful indicator of a commu-
nity based chlamydial screening programme
in which non-responders could be offered
opportunistic screening at the general prac-
tice. However certain crucial issues remain
unanswered. This acceptability survey was
done among women aged 18–25 years and
men 18–30 years. What happens with people
below the age of 18? We know that Chlamydia
trachomatis prevalence is associated with
young age, but can we also send home
screening kits to 15 year olds? What about
the parental opinions and legal implications—for
example, for the partner of a C trachomatis
positive younger?

In two surveys performed in general
practice in Amsterdam, Netherland, systematic
and opportunistic screening, prevalence was
strongly associated with young age but also
with ethnicity. Among young Surinam-Anthill
women aged <25 years, prevalence ranged from
5% in the general prac-
tice survey up to 22.4% in the opportunistic
survey. In the systematic survey an
unexpectedly high C trachomatis prevalence of 10%
was found among young Surinam-Anthill
women. Among the 15–24 year olds seeking
their health centre in Amsterdam which is
located in a multiethnic neighbourhood, half
of the population having a Surinam-Anthill
background, C trachomatis prevalence was 25%.

The question is not whether non-accept-
able home screening is for the youngest age
group, who might be most at risk, but also
how acceptable home testing is for people
with different ethnic backgrounds and people
living in low socioeconomic status and high
risk environments.

We piloted a pharmacy assisted approach
offering urine home testing to all sexually
active women age 15–30 years who came to
our pharmacy to collect their contraceptives.
Since the start 4 months ago 189 people
received an information leaflet and home test
package together with their contraceptives.
Fifty nine participated and sent their urine;
four were positive (6.7%). The participation
rate was 31%, lower than the reported rate for
women in the article of Stephenson et al.

The assumption by the authors that people
who do not participate for home testing will
turn up for opportunistic screening at the
general practice is, however, merely a hypoth-
osis, and not a strong one, especially not for
boys and men.

Tackling issues like risk perception and risk
environment and changing healthcare seek-
ing behaviours is not an easy task. Moreover,
a community based C trachomatis prevention
programme will require not only second-
ary prevention by active case finding but also
primary prevention. What is needed is an
integrated set of strategies, which are mutu-
ally reinforcing and that are age, sex, culture,
and context specific. Quite a challenge!

JENNIFER HOPWOOD
HARRY MALLINSON
SALLY WELLSTEED
Chlamydia Pilot Office, Evidence Based Practice
Centre, St Catherine’s Hospital, Church Road,
Birkenhead CH42 0LQ

Correspondence to: Dr Hopwood

Acceptable for publication 7 June 2000

Acceptability of home screening for
chlamydial infection: some remaining
issues

EDITOR,—In the recent article by Stephenson
et al the authors describe participation rates
of 39% for women and 46% for men for
home screening and comment: that this
might form a useful indicator of a commu-
nity based chlamydial screening programme
in which non-responders could be offered
opportunistic screening at the general prac-
tice. However certain crucial issues remain
unanswered. This acceptability survey was
done among women aged 18–25 years and
men 18–30 years. What happens with people
below the age of 18? We know that Chlamydia
trachomatis prevalence is associated with
young age, but can we also send home
screening kits to 15 year olds? What about
the parental opinions and legal implications—for
example, for the partner of a C trachomatis
positive younger?

In two surveys performed in general
practice in Amsterdam, Netherland, systematic
and opportunistic screening, prevalence was
strongly associated with young age but also
with ethnicity. Among young Surinam-Anthill
women aged <25 years, prevalence ranged from
5% in the general prac-
tice survey up to 22.4% in the opportunistic
survey. In the systematic survey an
unexpectedly high C trachomatis prevalence of 10%
was found among young Surinam-Anthill
women. Among the 15–24 year olds seeking
their health centre in Amsterdam which is
located in a multiethnic neighbourhood, half
of the population having a Surinam-Anthill
background, C trachomatis prevalence was 25%.

The question is not whether non-accept-
able home screening is for the youngest age
group, who might be most at risk, but also
how acceptable home testing is for people
with different ethnic backgrounds and people
living in low socioeconomic status and high
risk environments.

We piloted a pharmacy assisted approach
offering urine home testing to all sexually
active women age 15–30 years who came to
our pharmacy to collect their contraceptives.
Since the start 4 months ago 189 people
received an information leaflet and home test
package together with their contraceptives.
Fifty nine participated and sent their urine;
four were positive (6.7%). The participation
rate was 31%, lower than the reported rate for
women in the article of Stephenson et al.

The assumption by the authors that people
who do not participate for home testing will
turn up for opportunistic screening at the
general practice is, however, merely a hypoth-
osis, and not a strong one, especially not for
boys and men.

Tackling issues like risk perception and risk
environment and changing healthcare seek-
ing behaviours is not an easy task. Moreover,
a community based C trachomatis prevention
programme will require not only second-
ary prevention by active case finding but also
primary prevention. What is needed is an
integrated set of strategies, which are mutu-
ally reinforcing and that are age, sex, culture,
and context specific. Quite a challenge!

screening for chlamydial infection: is it accep-
table to young men and women? Sex Transm
2 Valkengoed IGM, Boeke AJP, Brule van den
AFC, et al. Systematic screening for asympto-
matic Chlamydia trachomatis infections by
home obtained mailed urine samples in men
and women in general practice (Dutch). Ned
3 Hock JAR van den, Minder-Folkerts DKF,
Coutinho RA, et al. Opportunistic screening
for genital Chlamydia trachomatis infection
among the sexually active population of
Amsterdam (Dutch). Ned Tijdschr Geneeskd
1999;143:668–72.
4 Van Bergen JEAM, Stroucken J, Spanjaard L,
et al. Systematic screening for asympto-
matic Chlamydia trachomatis infections by
home obtained mailed urine samples in men
and women in general practice (Dutch). Ned
Nurse counselling for women with abnormal cervical cytology improves colposcopy and cytology follow up attendance rates

EDITOR,—A well organised cervical screening programme has considerable benefits; however, one negative aspect is anxiety associated with abnormal results. The NHSCSP guidelines state that an explanatory leaflet should be given to women with abnormal cytology and those being referred for colposcopy, with a verbal explanation wherever possible.1 We assessed if there is any additional benefit from a verbal explanation, following written information, when an abnormal smear result is given, in understanding and future attendance for colposcopy and cytology follow-up.

Between April and December 1998 we recruited 89 women with abnormal cytology. All women attending for results are given the NHSCSP leaflet “What your abnormal result means” if their smear shows borderline changes, mild, moderate, or severe dyskaryosis. The study women completed a questionnaire before and after the reading of the leaflet. A nurse (BH) then gave a verbal explanation about the smear result. They then completed the questionnaire again. Attendance for colposcopy and cytology follow-up was recorded, defaulting being defined as non-attendance without cancellation. Default rates were compared with other women with abnormal cytology during the same period. They were not included in the study as they attended when the specified nurse was not available. They had all received the leaflet but not a structured explanation.

The explanation for each woman took approximately 15 minutes. The results of the questionnaire before and after explanation are shown in table 1. There was a significant improvement in understanding and reduction in anxiety. The control group comprised 104 women. In the study group 65 required colposcopy; three (4.6%) defaulted, compared with seven of 38 (18.4%) women not receiving a verbal explanation; p= 0.03 Fisher’s exact test; OR 0.21 (95% CI 0.03–1.03). Of the study group, 81 should have attended for follow up colposcopy or smear showing borderline changes; 12 (15%) defaulted compared with 37 of 95 (38.8%) women not receiving a verbal explanation; p< 0.001 χ² test; OR 0.18 (95% CI 0.08–0.41). Eventually only one (1.5%) in the study group and two (5.3%) of the controls did not attend for colposcopy, and 11 (13.8%) and 24 (25.3%) defaulted on cytology follow up.

Despite the leaflet the women in our study still had misunderstandings and anxieties. The verbal explanation helped clarify these. Verbal information can be tailored to the individual, some requested detailed descriptions, others preferred a simpler explanation (as reported previously). This is not possible with written information. Marteau et al found that a brief, simple booklet increased knowledge and reduced anxiety whereas a more complex booklet increased knowledge but did not reduce anxiety.2

The default rates were lower in those receiving the verbal explanation. Lerman et al found that women with abnormal cytology who defaulted colposcopy appointments were more worried about cancer with impairment of mood and sleeping.3 Following the explanation our default rate for colposcopy was within the 15% recommended target,4 and follow up cytology was similar to the rates reported in primary care.5

There are deficits in this study. The lack of randomisation means the improvement in default rates could be the result of baseline differences rather than the verbal explanation. However, it has shown benefit to the women by improving understanding. The department has also benefited; although extra nursing time is required recalling non-attendees. Clerical, medical, and secretarial time and cost of complications to the individual is enormous, as is the cost to the NHS—£200 million per year.6 Screening reduced the prevalence of infection in Sweden and the United States.7 Computer modelling suggests that screening in this country would be cost effective.8

After screening for chlamydia, a means of contacting clients to give results was arranged—for example, letter or phone call. On the Wirral, 2651 patients were screened in the first 4 months—2323 women and 285 men (34, sex not recorded). Sixty eight (2.6%) gave a mobile phone number, half (35) using this as their only means of contact. Sixty five were female and two male (one patient not recorded). Thus, women (2.8%) were more likely to use mobile phones than men (0.7%) (p= 0.03). The genitourinary medicine (GUM) clinic screened 358 patients. Only 68 (19%) gave an address. The results of a further 469 (17.7%) of the screened population went back to the screening site. These clients could be interested in contact via mobile phone if it was openly offered (data collected from the Public Health Laboratory Service (PHLS) database and analysed on SPSS). A survey by NOP Social and Political, confidentiality is important to people in the target age group (unpublished data). Patients consider their mobile phones to be a secure method of communication between themselves and us. The advent of DNA amplification in the detection of STIs has opened up new possibilities.9 There are 30 000 websites pertaining to chlamydia. An internet clinic would be aimed at mildly symptomatic or asymptomatic patients. The client could access the website and request swabs or urine pots through the post then return them the same way.

If the patients were positive, they would need to attend a GUM clinic or equivalent.

Table 1 The questionnaire results before and after the verbal explanation

<table>
<thead>
<tr>
<th>Question</th>
<th>Response (n=89)</th>
<th>Before</th>
<th>After</th>
<th>χ² test p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well do you understand the result you have been given?</td>
<td>Not at all</td>
<td>26</td>
<td>1</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>A little</td>
<td>36</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A lot</td>
<td>27</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Are you worried about the result of your smear test?</td>
<td>Yes</td>
<td>45</td>
<td>13</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>42</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Will it worry you if we need to do further investigations?</td>
<td>Yes</td>
<td>36</td>
<td>11</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>40</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Are you worried that further investigations will be painful?</td>
<td>Yes</td>
<td>55</td>
<td>28</td>
<td>0.0002</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td>11</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>23</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Do you think that any abnormality found can be treated?</td>
<td>Yes</td>
<td>61</td>
<td>85</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>25</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Do you think you have cancer?</td>
<td>Yes</td>
<td>5</td>
<td>1</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Do you think this smear result will affect your ability to have children?</td>
<td>Yes</td>
<td>15</td>
<td>2</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>34</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Do you think this result will change your attitude to sex with your partner?</td>
<td>Yes</td>
<td>18</td>
<td>13</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td>30</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>41</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Do you think this result will affect the way your partner thinks of you?</td>
<td>Yes</td>
<td>8</td>
<td>4</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>68</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

7 Accepted for publication 19 June 2000

Phone sex: information technology (IT) and sexually transmitted infection in young people

EDITOR,—The recent article on the acceptability of home testing for chlamydia was noted.1 We would like to extrapolate this concept. Young people could be accessed via an internet clinic. Our experience during the chlamydia pilot study is that this population are receptive to the use of technology, in particular mobile phones. The presence of sex on the internet has been widely publicised. We propose that testing for sexually transmitted infection (STI) via the internet is the next logical step.

The chlamydia pilot study was funded by the Department of Health, to investigate the feasibility of screening 16–25 year old women (and some men), for chlamydia, using a urine specimen. Antibiotics for chlamydia are cheap and effective. The cost of complications to the individual is enormous, as is the cost to the NHS—£200 million per year.

Screening reduced the prevalence of infection in Sweden and the United States. Computer modelling suggests that screening in this country would be cost effective.2

After screening for chlamydia, a means of contacting clients to give results was arranged—for example, letter or phone call. On the Wirral, 2651 patients were screened in the first 4 months—2323 women and 285 men (34, sex not recorded). Sixty eight (2.6%) gave a mobile phone number, half (35) using this as their only means of contact. Sixty five were female and two male (one patient not recorded). Thus, women (2.8%) were more likely to use mobile phones than men (0.7%) (p< 0.03). The genitourinary medicine (GUM) clinic screened 358 patients. Only 68 (19%) gave an address. The results of a further 469 (17.7%) of the screened population went back to the screening site. These clients could be interested in contact via mobile phone if it was openly offered (data collected from the Public Health Laboratory Service (PHLS) database and analysed on SPSS). A survey by NOP Social and Political, confidentiality is important to people in the target age group (unpublished data). Patients consider their mobile phones to be a secure method of communication between themselves and us. The advent of DNA amplification in the detection of STIs has opened up new possibilities.3

According to a survey by NOP Social and Political, confidentiality is important to people in the target age group (unpublished data). Patients consider their mobile phones to be a secure method of communication between themselves and us. The advent of DNA amplification in the detection of STIs has opened up new possibilities.3

There are 30 000 websites pertaining to chlamydia. An internet clinic would be aimed at mildly symptomatic or asymptomatic patients. The client could access the website and request swabs or urine pots through the post then return them the same way.

If the patients were positive, they would need to attend a GUM clinic or equivalent.
Other infections should not be overlooked. Partner notification is necessary. Contact slips could be supplied but the health adviser’s role should not be underestimated.

Security on the internet would have to be addressed. However, the anonymity and convenience of participating from home may increase testing for STIs. This may appeal to younger patients particularly, in view of their experience with IT.

In summary, IT is rising in the younger population. Their utilisation of technology is demonstrated by mobile phone use in the chlamydia pilot study. Health providers should respond using media with which the target population is comfortable. We might just access a whole generation. The future’s bright . . .

Conflicts of interest: None.

Funding of chlamydia pilot study: Department of Health.

MARY HERNON
JENNIFER HOPWOOD
HARRY MALLINSON
Liverpool Laboratory, PHLS North West

A K GHOSH
Arrowe Park Hospital
Correspondence to: Dr M Hernon, Department of Genitourinary Medicine, Arrowe Park Hospital, Upton, Wirral, CH49 9PE
mary.hernon@ccmail.wirral-tr.nwest.nhs.uk


Gonorrhoea: an incidence graph of Mersey region data for the 1990s and discussion on the factors behind the changing pattern of incidence

EDITOR.—Gonorrhoea is one of the oldest and a highly infectious sexually transmitted infection. Its prevalence is dynamic and fluctuates over time and is influenced by a number of factors. The incidence of this infection has changed from a trend of steady decline to a recent increase in many parts of the world.1,2 The pattern of incidence is closely related to socioeconomic conditions.3,4

An incidence graph of Mersey Region figures (fig 1) for the 1990s and a discussion on the possible factors associated with the changing pattern is presented here. The incidence from the Mersey Region shows a steady decline until the mid 1990s followed by a recent increase and represents the trend in most areas. In spite of the advances in the diagnostic and therapeutic field, organised health advisory system, easy access walk-in clinics, complete confidentiality, and free treatments; the incidence of gonorrhoea is rising. From the broader analysis of the situation, it is possible to say that most of the factors behind this changing pattern are socio-economic. The factors may include advances in contraceptive, sexual liberalisation, increase in the mobility of population, and the changing economic environment. The cumulative result of all these factors is an increase in casual relationships. Casual sex is made riskier when it is performed unprotected and without much knowledge about the partner and is possibly the main reason behind the poor contact tracing of only 0.5 out of an average of 1.5 per patient.5

Some of these factors are part of the wider evolutionary process and are difficult issues to deal with, but preventive measures may be taken against others. In spite of the recent advances and better understanding of the disease in the recent years, there is still a lack of awareness, in the general population, of the possible mental and physical effects of such infection. The significant fall in the incidence of gonorrhoea seen in the late 1980s, secondary to extensive media coverage of HIV infection, shows how effective such campaigns can be. The present rise in the incidence of gonorrhoea in the past few years shows clearly that our prevention campaigns are not effective. The young teenagers who make up the pool of supply and the young females who make up the pool of asymptomatic reservoirs of the infection, are the two core groups our campaigns should be targeting.

At present there is no programme in the school curriculum about sexual health and no regular screening programme for sexually active young females. A programme of long term measures, such as education on sexual health and sexually transmitted infections in schools, and a programme of regular screening for gonorrhoea (and chlamydia) for all sexually active young females, may be useful and this can be, to start with, combined with the cervical smear screening programme at very little additional cost. Short term programmes, like vigorous media campaigns nationally and poster and leaflet campaigns locally in high risk recreational areas like pubs and clubs, may have an educational value and help reduce the incidence.

B BHATTACHARJEE
A K GHOSH
Department of GU Medicine, Royal Liverpool University Hospital, Prescot Street, Liverpool L7 8XP
Correspondence to: Dr Bhattacharjee, Department of Genitourinary Medicine, Arrowe Park Hospital, Upton, Wirral, Merseyside L49 9PE


Accepted for publication 19 June 2000

Russian STI


We hope for further collaboration. We shall inform you about our future plans.

M A GOMBERG
L G DOUGACHIEVA
Assistant editor
SANAM, Russian Association for the Prevention of Sexually Transmitted Infections, WHO Collaborating Centre, Dzerator Strass, 13, 119084 Moscow, Russia
Accepted for publication 19 June 2000

Cheilitis in association with indinavir

EDITOR.—There is increasing speculation that indinavir may cause side effects which have been previously associated with high concentrations of retinoids. In the presence of all-trans-retinoic acid (ATRA), indinavir, but not other protease inhibitors (PIs), alters stem cell differentiation in vitro, not seen in the presence of ATRA alone.1 Alopecia and cheilitis are two side effects associated with both retinoids and the protease inhibitor indinavir (but not with any of the other protease inhibitors). These side effects can be

Figure 1 Total incidence of gonorrhoea in the Mersey Region in 1990–9 (in absolute numbers).

www.sextransinf.com
reversed on changing from indinavir to an alternative PI. We report a case of cheilitis associated with indinavir which resolved rapidly on changing treatment.

A 35 year old African man developed cheilitis (fig 1A) 5 months after commencing HAART with stavudine, lamivudine, and indinavir. His CD4 lymphocyte count at that time was 238 cells \times 10^3, with an HIV viral load of 78 copies per ml (Chiron bDNA assay version 3). He had a medical history of granulomatous uveitis of undetermined cause, which developed before HAART. It responded to prolonged treatment with oral prednisolone 40 mg daily and has since remained quiescent. The oral corticosteroids were tailed off and finally discontinued a month before the cheilitis developed. Following the development of cheilitis, further investigations showed: positive IgG antinuclear antibodies with a homogeneous pattern and a titre of 1 in 320; rheumatoid factor positive in 1 of 40; anti-Ro and anti Scl-70 both negative; serum angiotensin converting enzyme 59 U/l (normal range 20–95); chest x-ray normal; C reactive protein 1 mg/l; erythrocyte sedimentation rate 4 mm in the first hour. Biopsy of the lip showed acanthosis and parakeratosis without associated inflammation. It was initially considered that the cheilitis might be an autoimmune phenomenon, but topical treatment with Eumovate (clobetasone butyrate, GlaxoWellcome) failed to improve the condition, which persisted for 10 months until the indinavir was changed to efavirenz. At the time of discontinuation of indinavir, his CD4 lymphocyte count was changed to efavirenz. At the time of Figure 1 (A) Shows the indinavir related cheilitis and (B) after discontinuation of indinavir.

This book is a must for anyone interested in how this fascinating organism causes damage. The first part reviews the knowledge on the molecular phylogeny, genomic autobiography, developmental biology, and metabolism of chlamydiae. It shows how far our knowledge of the organism has broadened in the past few years, particularly as gene sequencing has changed our view of chlamydiae. Until this was made available, metabolic studies on chlamydiae were hampered by its intracellular obligate nature, lack of knowledge of the enzyme pathways, and the relatively small genome which suggested very limited metabolic activity. It now becomes apparent that the organism, which we believed to be biologically crippled, has quite sophisticated biosynthetic capabilities. This opens the way to creating a non-cell dependent culture system in the future.

A chapter by Ted Hackstadt on the cell biology shows a whole spectrum of novel interactions with the host cell that contribute to the success of the genus as pathogens. This is followed by an excellent chapter by Julius Schachter on infection and disease epidemiology. He makes the interesting point that given that some individuals lose antibody over time it is possible that almost all humans have met the organism at some time in their lives. This may be quite important in understanding some of the longer term consequences of chlamydial infections, where the organism may not be isolated and antibody tests may be negative. These sequelae are covered in subsequent chapters by Michael Ward, Robert Brunum, and Roger Rank. Since all three concentrate on immunological response to chlamydia there is bound to be some overlap, but also some differences and interesting emphasis. For example Ward plays down the current obsession with cross reactions between chlamydia and human heat shock proteins. A lot of our information, particularly on the immunology, comes from animal studies and their relevance to human pathology remains to be established. In an excellent final chapter Penelope Hitchcock points to the future directions of research. In particular, she laments that little research has been done in men with chlamydia. Certainly the book is rather short on discussion of the male. There is also a need to find a male model for pathogenesis. Non-gonococcal urethritis maybe a suitable, and easily accessible, marker of chlamydial infection in men and deserves more in-depth study. Much more research also needs to be done, particularly, on clinically inapparent infections in the human. This book is a must for all those interested in this fascinating organism. Perhaps while not losing sight of the “why” and the “how” of sexual transmission we should perhaps while not losing sight of the “why” and the “how” of sexual transmission we should also divert some resources into the “how” of its damage.

BOOK REVIEW


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@tpsp.sheridan.com).

MSSVD Clinical Developments Fund

The MSSVD Clinical Developments Fund is asking for applications for funding to support projects that advance the understanding and practice of genitourinary medicine. An amount of £10 000 is available to one or more successful applicant(s). Closing date for application is 25 August 2000. Further details: Dr Keith Radcliffe, Honorary Assistant Secretary MSSVD, Whitall Street Clinic, Whitall Street, Birmingham B4 6DH (tel: 0121 237 5719; fax: 0121 237 5729; email: keith.radcliffe@bshct.wmids.nhs.uk).

3rd Congress of the Baltic Association of Dermatovenerology, 7–9 September 2000, Riga, Latvia

Further details: Professor Andris Y Rubins, Department of Dermatovenerology, Medical Academy of Latvia, K Valdemara Street, 76–75, Riga, LV-1013, Latvia (tel: (+371) 7370395; fax: (+371) 7361615; email: arubins@apollo.lv).

National NCCG Update Meeting, Bromsgrove Stakis Hotel, 23–24 September 2000

Further details: Kathy Taylor (tel: 01384 235207; email: palmtraining@tesco.net).

11th Regional Meeting of International Union against Sexually Transmitted Infections, South East Asian and Western Pacific Branch and 24th National Conference of Indian Association for the Study of Sexually Transmitted Diseases and AIDS, 13–15 October 2000, Chandigarh, India

Further details: Dr Bhushan Kumar, Organising Secretary, 11th Regional Meeting of IUSTI-Asia Pacific (SE Asia and W Pacific Branch), Department of Dermatology, Venerology and Leprosy, PGIMER, Chandigarh - 160 012, India (tel: +91 (0172) 745330; fax: +91 (0172) 744401/745078; email: kumarbhushan@hotmail.com).
New Zealand Venereological Society Conference, Centennial Convention Centre, Palmerston North, New Zealand, 18–20 October 2000
Ka Hijokita Ka Korerotia Mo Te Tau Rua Mano (Maori) “Walk the Talk 2000.” Further details: Sue Peck, Conference Organiser, SP Conference Management, PO Box 4400, Palmerston North, New Zealand (tel: 64 6 357 1466; fax 64 6 357 1426; email suepeck@xtra.co.nz).

Consortium of Thai Training Institutes for STDs and AIDS—10th STDs/AIDS diploma course, Bangkok Hospital, Bangkok (30 Oct–12 Nov) and Prince of Songkla University, Hat Yai, Thailand (13–23 Nov) 30 October–23 November 2000
Further details: Hat Yai Secretariat, Dr Verapol Chandyent, Dept of OB-GYN, Faculty of Medicine, Prince of Songkla University, Hat Yai, Songkla 90110, Thailand (fax: (66-74) 446 361; email: cvverapol@ratree.psu.ac.th or Bangkok Secretariat, Dr Thanit Palanuvej, Bangkok Hospital, 189 Sathorn Road, Bangkok 10120, Thailand (fax: (66-2) 286 3013; email: pthanit@email.ksc.net).

Consortium of Thai Training Institutes for STDs and AIDS—International Reunion and Refresher Course on Sexual Health, Lee Garden Plaza Hotel, Hat Yai, Thailand 24–26 November 2000
Further details: Hat Yai Secretariat, Dr Verapol Chandyent, Dept of OB-GYN, Faculty of Medicine, Prince of Songkla University, Hat Yai, Songkla 90110, Thailand (fax: (66-74) 446 361; email: cvverapol@ratree.psu.ac.th or Bangkok Secretariat, Dr Thanit Palanuvej, Bangkok Hospital, 189 Sathorn Road, Bangkok 10120, Thailand (fax: (66-2) 286 3013; email: pthanit@email.ksc.net).

Royal Society of Medicine and National Institutes of Health International Conference, RSM London, 7–9 December 2000 The RSM in London, UK, and the NIH in Bethesda, Maryland, USA, are organising an international conference to be held at the RSM on “New trends in HIV management and research.” Further details: Victoria Boswell, Academic Conference Assistant, Royal Society of Medicine (tel: +44 (0)20 7290 2965; fax:+44 (0)20 7290 2977; email: victoria.boswell@royalsocmed.ac.uk).

Call for papers—6th European Forum on Quality Improvement in Health Care, 29–31 March 2001, Bologna, Italy Further details: BMA/BMJ Conference Unit, BMA House, Tavistock Square, London WC1H 9JP (tel: +44 (0) 20 7383 6609; fax: +44 (0) 20 7383 6689; email: quality@bma.org.uk; website: www.quality.bmj.org).

Correction
An error occurred in the editorial by R D Maw which was published in the June issue (STI 2000;76:153). In the second column, lines 3–6, podophyllin should be replaced by podophyllotoxin in each case.

CURRENT PUBLICATIONS

Selected titles form recent reports published worldwide are arranged in the following sections:
Gonorrhoea
Chlamydia
Other sexually transmitted infections
Hepatitis
Herpes
Human papillomavirus infection
Cervical cytology and colposcopy
Other sexually transmitted infections
Public health and social aspects
Microbiology and immunology
Dermatology
Miscellaneous

Gonorrhoea
Gonorrhoea, chlamydia and the sexual network—pushing the envelope (Editorial).
JM ZEMLIAN. Sex Transm Dis 2000;27:224–5

Gonorrhoea in male adolescents and young adults in Newark, New Jersey—implications of risk factors and patient preferences for prevention strategies.

Comparative epidemiology of heterosexual gonococcal and chlamydial network—implications for transmission patterns.


Chlamydia
Unique gonococcal phenotype associated with asymptomatic infection in men and with erroneous diagnosis of nongonococcal urethritis.
WH WHITTINGTON, KK HOLMES. J Infect Dis 2000;184:48–58

Asymptomatic infections have been associated with strains of Neisseria gonorrhoeae belonging to certain phenotypes; arginine, hypoxanthine, and uracil requiring (AHU) and proline, citrulline, and uracil requiring (PCU). This study describes an outbreak caused by a new phenotype, citrulline and uracil requiring, which has unique clinical presentation. The authors report an increase in the prevalence of gonococci belonging to the CU auxotype from 1.6% in 1987 to 16.5% in 1997 in King County, Washington, USA. The characteristics of these strains were that they belonged to one of two closely related serovars, IB-1 and IB-3 that differ only by reactivity with a single antibody, they were all susceptible to penicillin, tetracycline, and erythromycin and were highly susceptible to broad spectrum cephalosporins and fluoroquinolones. The number of cases rose from 57 to 75 per year in the 1980s to 125 and 115 in 1996 and 1997 respectively despite a fall in the total number of cases of gonorrhoea seen. The CU auxotype was also isolated more frequently than other types from healthcare facilities other than GU clinics.

The demographic and behavioural data showed that men infected with the CU auxotype were more often black, heterosexual, younger, less likely to seek care for symptoms and to be co-infected with Chlamydia trachomatis than were men infected with other auxotypes. Among heterosexual men, infection with the CU auxotype produced symptoms of urethral discharge or dysuria or signs of moderate or profuse urethral discharge less often than in men infected with other auxotypes. Symptoms of dysuria and discharge were also of longer duration and urethral smears showing intracellular Gram negative diplococci were found in only 67% of patients with the CU auxotype compared with 95% of men with other types.

The characteristics of the CU auxotype may enable these strains to evade detection and hence confer a selective advantage for survival. This is of particular concern when total numbers have fallen and the pressure for screening asymptomatic populations has decreased.

Concurrent gonococcal and chlamydial infection—how best to treat.
AJ ROBINSON, GL RIDGWAY. Drugs 2000;59:801–14

Neisseria gonorrhoeae MS11 mKp opacity protein expression in vitro and during human volunteer infectivity studies.

Gonococcal lipo-oligosaccharide is a ligand for the asialo-glycoprotein receptor on human sperm.

Reexamining the prevalence of Chlamydia trachomatis infection among gay men with urethritis—implications for STD policy and HIV prevention activities.
EL GIESNS, J FLOOD, CK KENT et al. Sex Transm Dis 2000;27:249–51

Pooling of urine specimens for detection of asymptomatic Chlamydia trachomatis infections by PCR in a low-prevalence population: cost-saving strategy for epidemiological studies and screening programs.

Multiple drug-resistant Chlamydia trachomatis associated with clinical treatment failure.
Prevalence of *Chlamydia trachomatis* in urine of male patients with ankylosing spondylitis is not increased.


The value of *Chlamydia trachomatis* antibody testing as part of routine infertility investigations.

K THOMAS, L BOUGHELIN, PT MANNISON, NG HADDAD. *Hum Reprod* 2000;15:1079–82

Low correlation of serology with detection of *Chlamydia trachomatis* by ligase chain reaction and antigen ELISA.


The relationship of inflammation in the Papanicolaou smear to *Chlamydia trachomatis* infection in a high-risk population.

RI PALER, DR SIMPSON, AM KAYE et al. *Contraception* 2000;61:231–4

In situ analysis of the evolution of the primary immune response in murine *Chlamydia trachomatis* genital tract infection.


**Candidiasis**

Practice guidelines for the treatment of candidiasis.


Candida vaginitis—self-reported incidence and associated costs.


Experimental candidosis. Pathogenesis, prevention, therapy.

E SEGAL. *Mycoses* 2000;42:55–60

Estrogen effects on *Candida albicans*: a potential virulence-regulating mechanism.

XQ ZHANG, M ESCHMANN, RT BURT, B LARSEN. *J Infect Dis* 2000;181:1441–6

Investigation of e-glucosidase as a potential virulence factor of *Candida albicans*.


Cytokine modulation of specific and nonspecific immunity to *Candida albicans*.

L ROMANI. *Myocoses* 2000;42:45–8

Histidine kinase, two-component signal transduction proteins of *Candida albicans* and the pathogenesis of candidosis.

JA CALERA, R CALDERONE. *Myocoses* 2000;42:49–54

Differential activation of a *Candida albicans* virulence gene family during infection.


**Bacterial vaginosis**

Bacterial vaginosis.


Urinary tract infections in women with bacterial vaginosis.


Characterisation and selection of a *Lactobacillus* species to re-colonise the vagina of women with recurrent bacterial vaginosis.


Induction of human immunodeficiency virus type 1 expression by anaerobes associated with bacterial vaginosis.


**Trichomoniasis**

Consider diagnosis and treatment of trichomoniasis in men (Editorial).

JN KRIEGER. *Sex Transm Dis* 2000;27:241–7

Comparative prevalence of infection with *Trichomonas vaginalis* among men attending a sexually transmitted diseases clinic.


A meta-analysis of the Papanicolaou smear and wet mount for the diagnosis of vaginal trichomoniasis.


A novel cysteine proteinase (CP65) of *Trichomonas vaginalis* involved in cytotoxicity.


**Pelvic inflammatory disease**

Risk factors for pelvic inflammatory disease in inner-city adolescents.

AL SUNS, P HOMEL, M HAMABERSCHLAG, K KROMBERG. *Sex Transm Dis* 2000;27:289–91

**Syphilis and other treponematoses**

Potential for community-based screening, treatment and antibiotic prophylaxis for syphilis prevention.

RH KAIN, KE MOSELEY, G JOHNSON, TA FARLEY. *Sex Transm Dis* 2000;27:188–92

Posterior uveitis in patients with positive serology for syphilis.


*Treponema pallidum* surface immunofluorescence assay for serologic diagnosis of syphilis.


A pilot study evaluatingceftriaxone and penicillin G as treatment agents for neurosyphilis in human immunodeficiency virus-infected individuals.


Oposonc potential, protective capacity and sequence conservation of the *Treponema pallidum* subspecies pallidum Tp92.


**Hepatitis**

Natural history of hepatitis C: its impact on clinical management.

AM DEBSCHEL. *Hepatology* 2000;31:1014–9

Seroprevalence and risk factors of hepatitis B, hepatitis C and human cytomegalovirus among HIV-infected and high-risk uninfected adolescents—findings of the REACH study.


**Herpes**

Herpes simplex virus type 1 as a cause of genital herpes: impact on surveillance and prevention.

WE LAFFERTY, L DOWNBY, C CELUM, A WALK. *J Infect Dis* 2000;181:1454–7

Testing for herpes simplex virus type 2—full steam ahead? (Editorial).

J MILLS. *Sex Transm Dis* 2000;27:270–1

HSV-2 specific serology should be offered routinely to antenatal patients.


HSV-2 specific serology should not be offered routinely to antenatal patients.


Seroprevalence of herpes simplex virus type 2 infection among attendees of a sexually transmitted disease clinic in Italy.


Herpes simplex virus-type 2 seropositivity in a Danish adult population denying previous episodes of genital herpes.

CS PETERSSEN, FG LARSEN, C ZACHARIAE, M HEIDENHEIM. *Acta Dermato-Venereol* 2000;80:158
Seroprevalence of herpes simplex virus type 1 and type 2 in selected German populations—relevance for the incidence of genital herpes.


Valaciclovir—a review of its long term utility in the management of genital her- pes simplex virus and cytomegalovirus infections.


Characterization of an acyclovir-resistant herpes simplex virus type 2 strain isolated from a premature neonate.


HSV.com: Maneuvering the internet-works of viral neuropathogenesis and evasion of the host defense.

S L TAN, MG KATZE. Proc Natl Acad Sci USA 2000;97:5684–6

Molecular epidemiology of herpes simplex virus type 1 genital infection in association with clinical manifestations.


Evaluation of an enzyme-linked viral inducible system for the rapid detection of herpes simplex virus.


Premarket evaluation of the POCKit HSV-2 type-specific serologic test in culture-documented cases of genital herpes simplex virus type 2.

RL ASHLEY, A WALD, M EAGLETON. Sex Transm Dis 2000;27:266–9

Immunisation with phase displaying peptides representing single epitopes of the glycoprotein G can give rise to partial protective immunity to HSV-2.

AM GRABOWSKA, R JENNINGS, P LAING et al. Virology 2000;269:47–53

Use of herpes simplex virus type 1 ISCOMS 703 vaccine for prophylactic and therapeutic treatment of primary and recurrent HSV-2 infection in guinea pigs.

JR SIMMS, AF HEATH, R JENNINGS. J Infect Dis 2000;181:1240–8

Antibody responses, cytokine levels and protection of mice immunized with HSV-2 antigens formulated into ISV or ISCOM delivery systems.


Interferon-γ up-regulates intercellular adhesion molecule-1 and vascular cell adhesion molecule-1 and recruits lymphocytes into the vagina of immune mice challenged with herpes simplex virus-2.

MB PARR, EL PARR. Immunology 2000;99:540–5

Evaluation of the inactivation of infectious herpes simplex virus by host-defense peptides.


Hydrogels containing monoparecin prevent intravaginal and intracutaneous infections with HSV-2 in mice: impact on the search for vaginal microbicides.


1,3-dihydroxyacridone derivatives as inhibitors of herpes virus replication.

PAKANTAP Chat, CT LOWDEN, KF BASTOW. Antiviral Res 2000;45:123–34

**Human papillomavirus infection**

Papillomaviruses causing cancer: eva- sion from host-cell control in early events in carcinogenesis.


Contemporary theories of cervical carci- nogenesis: the virus, the host and the stem cell.

CP CRUM. Mod Pathol 2000;13:243–51


A simplified and reliable HPV testing of archival Papanicolaou-stained cervical smears: application to cervical smears from cancer patients starting with cyto- logical normal smears.


High prevalence of human papillomavi- rous type 16 infection among children.


Human papillomaviruses and vulvar vestibulitis.


Human papillomavirus DNA in penile carcinomas in Argentina: analysis of primary tumors and lymph nodes.


Comparison of human papillomavirus genotypes in archival cervical cancer specimens from Alaska natives, Green- land natives and Danish Caucasians.


Warty (condylomatous) squamous cell carcinoma of the penis—a report of 11 cases and proposed classification of ‘ver- ruciform’ penile tumors.


Type of human papillomavirus and ex- pression of p53 in elderly women with cervical cancer.

J SATTO, H HOSHIBA, K NODA. Gynecol Obstet Invest 2000;49:190–3

High prevalence of serum antibodies to Ras and type 16 E4 proteins of human papillomavirus in patients with precancer- ous lesions of the uterine cervix.


Boosting with recombinant vaccinia in- creases HPV-16 E7-specific T cell pre- cursor frequencies of HPV-16 E7- expressing DNA vaccines.


Human tumor growth is inhibited by a vaccinia virus carrying the E2 gene of bovine papillomavirus.


Human papillomavirus type 16 E7 onco- protein represses transcription of human fibronectin.


Interleukin-10 increases Th1 cytokine production and cytotoxic potential in human papillomavirus-specific CD8+ cytotoxic T lymphocytes.


Cytokine profile of draining lymph node lymphocytes in mice grafted with syn- geneic keratinocytes expressing human papillomavirus type 16 E7 protein.

MC LOPERO, M STANLEY. J Gen Virol 2000;81:1175–82

**Cervical cytology and colposcopy**

Advances in cervical screening technol- ogy.

MH STOLER. Mod Pathol 2000;13:275–84

Clinical significance of the qualification of atypical squamous cells of undeter- mined significance: an analysis on the basis of histologic diagnoses.


Qualitative analysis of value judgments in interpreting cervicovaginal smears using the Bethesda System.


Papanicolaou smear history and diagno- sis of invasive cervical carcinoma among members of a large prepaid health plan.

HY SUNG, KA KEARNEY, M MILLER et al. Cancer 2000;88:2283–9

Cytologic and histologic diagnosis and significance of controversial squamous lesions of the uterine cervix.

MA DUGGAN. Mod Pathol 2000;13:252–60

Photodetection of cervical intraepithe- lial neoplasia using 5-aminoeverulnic acid-induced porphyrin fluorescence.

Glandular lesions of the uterine cervix, RJ ZAINO. Mod Pathol 2000;13:261–74

The effects of loop excision of the transformation zone on cervical length: implications for pregnancy.

Treatment of vaginal dysplasia: just a simple loop electrosurgical excision procedure?

AL SADIK. Am J Obstet Gynecol 2000;182:866–71

Other sexually transmitted infections

Mycoplasma genitalium in males with nongonococcal urethritis—prevalence and clinical efficacy of eradication.

Development of a serological test for Haemophilus ducreyi for seroreivalence studies.

An isogenic hemoglobin receptor-deficient mutant of Haemophilus ducreyi is attenuated in the human model of experimental infection.

Public health and social aspects

A prospective study on condom slippage and breakage among female brothel-based sex workers in Singapore.
ML WONG, RKW CHAN, D KOH, S WEE. Sex Transm Dis 2000;27:208–14

Condom acceptance is higher among travelers in Uganda.
M MABES, MJ WAVER, F MAKUMBI et al. AIDS 2000;14:733–42

Microbiology and immunology

Pathogenesis of abnormal vaginal bacterial flora.

Wet mount microscopy reflects functional vaginal lactobacillary flora better than gram stain.

Induction of mucosal immune responses in the human genital tract.

Surface characteristics of lactobacilli isolated from human vagina.
VS OCANA, E BRU, AAPD HOLGADO, ME NADERMA-CIAS. J Gen Appl Microbiol Tokyo 1999;45:203–12

Cytokine profile in genital tract secretions from female adolescents: impact of human immunodeficiency virus, human papillomavirus and other sexually transmitted pathogens.

Evidence that anoreceptive intercourse with ejaculate exposure is associated with rapid CD4 cell loss.
DJ WILEY, BR VISSCHER, S GROSSER et al. AIDS 2000;14:707–16

Dermatology

Recurrent squamous cell carcinoma of the vulva—clinopathologic determinants identifying low risk patients.
M PRETI, G GIBERTI, B BERGONCELLI, L MICHELETTI. Cancer 2000;88:1869–76

Anaerobic blanoposthitis: two cases and review of the literature.
S TAVAKOLITABASI, RJ HAMILL, SB GREENBERG. Anaerobe 2000;6:11–4

Proliferative epidermal lesions associated with anogenital Paget’s disease.

Caruncles at the external urethral meatus.
D AOKI, K NOMATA, S KANDA et al. J Urol 2000;163:1518

Cutaneous metastatic carcinoma of the penis: suspected metastasis implantation from a bladder tumor.
T MIYAMOTO, A REHARA, M ARAKI et al. J Urol 2000;163:1519

Miscellaneous

When is a sexually transmitted disease not an ‘STD’?

Notify or not to notify—STD patients’ perspectives of partner notification in Seattle.

Treatment of sexually transmitted bacterial diseases in pregnant women.
GOG DONDERS. Drugs 2000;59:377–86

Traditional intravaginal practices and the heterosexual transmission of diseases—a review.
JE BROWN, RC BROWN. Sex Transm Dis 2000;27:183–7

Extent of regretted sexual intercourse among young teenagers in Scotland: a cross sectional survey.
D WIGHT, M HENDERSON, G RAAB et al. BMJ 2000;320:1243–4

Sexually transmitted infections in European HIV-infected women: incidence in relation to time from infection.
BHR VANRENIHET, M PRINS, C LARSEN et al. AIDS 2000;14:595–604

Prevalence and characteristics of sexual abuse in a national sample of Swedish seventeen-year-old boys and girls.
K EDGAARD, K ORSTAD. Acta Paediatr 2000;89:310–9

Antibiotics for bacterial prostatitis.
JC NICKEL. J Urol 2000;163:1407

Saw palmetto for the treatment of men with lower urinary tract symptoms.
GS GEBER. J Urol 2000;163:1408–12

Cost utility analysis of sildenafil compared with papaverine-phenolamine injections.
EA STOLK, JY RUSCHBACH, M CAFFA et al. BMJ 2000;320:1165–7

Non-Hodgkin’s lymphoma involving the vagina—a clinopathologic analysis of 14 patients.

S HANJE FESCHER. Cancer 2000;88:2319–25

Finger-length ratios and sexual orientation.