LETTERS TO THE EDITOR

Chlamydial infections in children

EDITOR,—We know that *Chlamydia trachomatis* infections (serovars D-K) are a significant cause of morbidity in the adult population, particularly young women. This justifies the considerable efforts and costs of preventing, diagnosing, and treating chlamydial infections. It is also well established that *C trachomatis* can cause conjunctivitis and pneumonitis in neonates and infants as a result of vertical transmission.

There is no doubt that symptomatic children should be treated but should we also treat asymptomatic carriers? What would be the benefit of treating asymptomatic children of mothers who were proved or have a history suggestive of *C trachomatis* infection during their pregnancy? Should we treat these children systematically? Up to what age? These questions have recently arisen in our department after the diagnoses of *C trachomatis* conjunctivitis in several small children.

The American guidelines for the management of sexually transmitted infection[1] do not recommend prophylactic treatment to infants of chlamydia positive mothers but close clinical supervision and treatment if symptoms develop. These guidelines do highlight the importance of antenatal screening as the main preventive measure in the vertical transmission of *C trachomatis*. Routine prophylaxis with silver nitrate or topical antibiotics would not prevent *C trachomatis* transmission. Neither the UK national guidelines nor the SIGN (Scottish Intercollegiate Guidelines Network) guidelines[2 3] address the issue.

In preadolescent children sexual abuse should always be considered when a diagnosis of *C trachomatis* has been made, although there are reports of perinatally transmitted infections up to the age of 3[4] and in our department a family cluster of *C trachomatis* infection has recently been reported, including a 6 year old girl in whom there was no evidence of sexual abuse.[5]

We await with interest the results of the pilot chlamydial screening projects in Portsmouth and the Wirral but suggest that routine antenatal screening for *C trachomatis* infections with a nuclear amplification test (NAT) would reduce perinatal and infant morbidity and possible infection in children, whether symptomatic or not. At the very least, targeted antenatal screening of higher risk groups (young pregnant women up to 25, or those with new or multiple partners, as recommended by the American guidelines) should be clearly specified in the current UK guidelines.

A negative reliable chlamydial test documented during a pregnancy would make a diagnosis of *C trachomatis* infection in a child less likely to be of vertical perinatal transmission.

In the meantime, what should we do? Investigating and treating asymptomatic children as "contacts" may cause unnecessary anxiety and unpleasantness to both child and parents. Epidemiological antibiotic treatment is not exempt of risks to the individual patient and is likely to increase resistance in the general population.

We would welcome the view of clinicians and thus perhaps open a debate in an area of sexually transmitted infections in which not much is known.

C OROZ
K A M PORTER-BOVERI
C THOMPSON
Department of Genito-Urinary Medicine, Victoria Hospital, Hayfield Road, Kirkcaldy, Fife KY2 5AH, UK

Correspondence to: Dr Oroz

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Accepted for publication 30 August 2001

Self treatment among a sample of first time attenders at a genitourinary medicine clinic

EDITOR,—Many people self medicate or seek advice from others before attending a medical consultation and while this has been documented for a number of conditions, there is little reason to suppose the behaviour will be different for a sexually transmitted infection (STI). There may be specific problems with self medication for STIs since they may mask signs and symptoms and unprescribed use of antibiotics may select for resistance among strains of *Neisseria gonorrhoeae* and other bacteria residing within and outside the genital tract.[1] We examined all aspects of self care in a sample of first time attenders at a GUM clinic in the United Kingdom. There were 492 consecutive first time attenders in a 3 month period, of which we achieved the participation of 188 clients (128 females, 60 males).

Information was collected via structured interview carried out by a health adviser. We asked about a range of issues concerning treatment seeking and symptoms experienced by clients. We specifically asked clients what measures they had taken between suspecting an STI and attending the clinic. Forty four respondents (23%) reported using a medication or remedy before attending the clinic. A total of 80 remedies were mentioned. The most commonly reported treatment was the use of Canesten (n=15), followed by paracetamol (n=5), antibiotics (n=5), Diflucan (n=3), and unspecified pessaries (n=3). Sixteen other medications were reported, of which 12 were identified by brand name. Two respondents (one on the recommendation of her mother) reported drinking lemon barley water and one drank cranberry juice. One person drank more water than usual, another drank less. Avoiding milk and bread, eating live yoghurt, and taking bicarbonate of soda were all mentioned by at least one respondent. Most medications were acquired either from the chemist or from trusted others; these latter included a wife, a sister, two friends, and two mothers.

These findings fit well with data from other countries and support a large US study.[2] The wide range of self treatments attests to the lack of knowledge about what might or might not "work" as a treatment for the symptoms of a sexually transmitted infection. The very large number of named "products" is striking. Remedies involving changing eating and drinking patterns are fairly common and are usually the consequence of advice from others. Given the stigma associated with having a suspected STI it is not surprising that only a few respondents discussed their treatment strategy with others.

It is important that genitourinary clinic staff recognise that a significant proportion of people attending will have tried some form of self medication. It would be desirable to establish which products have been tried and how recently. There is also an opportunity here for offering advice and education for the future and ensuring that there is good understanding of the role of antibiotics.

M K PITTS
S CANNON
G SINGH
Australian Research Centre, sex, Health & Society, La Trobe University, 215 Franklin Street, Melbourne, Victoria 3000, Australia

Correspondence to: Professor Pitts
m.pitts@latrobe.edu.au

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Accepted for publication 30 August 2001

Circumcision and STD in the United States

EDITOR,—The study by Diseker *et al*,[1] though examining too small a study population to obtain statistically meaningful results in some aspects, is commendably objective. Their study tends to confirm previous research findings relative to circumcision versus syphilis and gonorrhoea, the majority of which indicate a strong (protective) relation between the non-circumcised state and syphilis and a weaker relation with gonorrhoea.

A brief examination of this and several previous studies going back 150 years on circumcision versus syphilis and gonorrhoea reveals an intriguing relation: syphilis is proportionally lower in circumcised men than it is in uncircumcised men.

In 1855, Hutchinson,[2] in England, reported a syphilis:gonorrhoea ratio of 0.23:1 for Jews and 1.54:1 for non-Jews (all ratios in this letter are my re-expressions of the original data). In 1934 Wolbarst,[3] a NY urologist examining 1500 cases, reported a ratio of syphilis and chancroid to gonorrhoea of 0.36:1 for circumcised men and 0.78:1 for uncircumcised men (only 5–25% of American men were routinely circumcised in the late 19th century/early 20th century).[4] I note from Diseker *et al*'s table 2 (Cross section analysis at baseline) that the ratio of syphilis to gonorrhoea is 0.06:1 in circumcised men

and 0.09:1 for uncircumcised men, while Table 4 (Cohort analysis—new STD) reveals 0.07:1 for circumcised men and 0.11:1 for uncircumcised men.

While the foregoing is obviously a very limited statistical analysis and other factors may play a part, it is nevertheless fascinating to see the consistently lower syphilis:gonorrhoea ratio in circumcised men, indicating a potential protective effect by circumcision against syphilis far more so than against gonorrhoea. Secondly, the syphilis:gonorrhoea ratio would appear to have decreased dramatically over time, which raises a question: *if* circumcision is more effective against syphilis than it is against gonorrhoea *and* considering the popularity of neonatal circumcision in the United States over many decades, would we not expect—ceteris paribus—to see in time a general decrease in the United States of syphilis in both relative and absolute terms?

I would encourage Diseker and colleagues to follow up their interesting study with further research on a larger scale into the relation between circumcision and STDs in order to establish more precisely the degree of protection, if any, afforded by circumcision as a prophylactic health measure.

STEFAN A BAILIS
Research and Education Association on Circumcision Health Effects, Bloomington, MN, USA

sabailis@mindspring.com

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Accepted for publication 20 July 2001

Hepatitis B and C seroprevalence in Novosibirsk, western Siberia

EDITOR,—Chronic liver disease represents one of the major public health problems in Western countries. Hepatitis B and C viruses are becoming the main causes of cirrhosis and primary liver carcinoma. Hepatitis C virus (HCV) accounts for approximately 20% of cases of acute hepatitis, 70% of chronic hepatitis, and 30% of end stage liver disease in the United States.[1] Today, injecting drug use and high risk sexual activity are the most frequently identified risk factors associated with HCV infection.[2] Likewise, in areas of high endemicity of hepatitis B virus (HBV), perinatal transmission is the main route of transmission, whereas in areas of low endemicity, sexual contact among high risk adults is predominant.[3]

Epidemiology of viral hepatitis is studied mostly in blood donors and patients; however, it is unknown whether donors represent the general population. The prevalence of viral hepatitis among children and adolescents is rarely investigated. However, in Italy the highest incidence of new hepatitis B cases (approximately 10 in 100 000) currently occurs in subjects between 15 and 24 years of age,[4] and in Russia young adults aged 15–29 account for 70–80% of acute viral hepatitis cases.[5]

The aim of the present study was to evaluate the occurrence of HBV and HCV markers among various population groups of Novosibirsk (western Siberia), Russia. Novosibirsk is the largest city in Siberia and the third one in Russia, with a population of approximately 1.4 million. The following groups of participants were examined in 1995–9:

- A random representative sample of adult population aged 25–64 years (161 males, 213 females).
- A random representative sample of school students aged 14–17 years (170 males, 226 females).
- Students of medical college aged 18–29 years (9 males, 94 females).
- Students of medical university (IV–VI grades) aged 17–31 years (40 males, 133 females).
- Blood donors (4552 people).

The study was approved by the local ethics committee, and each participant gave informed consent. HBsAg and anti-HCV antibodies were tested in serum samples using previously validated second generation ELISA kits ("Vector-Best," Novosibirsk, Russia).

The prevalence rates of viral hepatitis B and C markers among various population groups are shown in table 1. Prevalence of HBsAg and anti-HCV antibodies among general adult population was twice as high as in blood donors. Among schoolchildren, no difference was found between males and females. In adults, HCV was detected more frequently in males compared with females (8.2% and 3.3% respectively, $p < 0.05$). The association of both infections were found in 0.8% of adults, four times more frequently than in adolescents.

In the medical college students HBsAg was not detected, possibly because of the small number of people examined; HCV was found with the frequency similar to that in schoolchildren. On the other hand, in the medical university students, occurrence rates of hepatitis B and C markers were higher than in other groups.

In conclusion, seroprevalence of HBV in Novosibirsk is similar to that in central Russia; however, prevalence of HCV is higher that in the European part of Russia, especially among males.

Prevalence rates of viral hepatitis markers in the general population are 2–2.5 times higher than in blood donors. Blood donors could not serve as a basis for assessment of viral hepatitis prevalence in the community.

Medical students in last grades represent a risk group for the acquisition of the viral hepatitis infections.

OLEG V RESHETNIKOV
Institute of Internal Medicine, Novosibirsk, Russia

ALEXEI A KHRYANIN
Novosibirsk State Medical University, Novosibirsk, Russia

TATIANA R TEININA
Medical College, Novosibirsk, Russia

NIKOLAI A KRIVENCHUK
IRINA YU ZIMINA
ImDi Diagnostics, Novosibirsk, Russia

Correspondence to: Alexei A Khryanin, Main Post Office Box No 221, 630099, Novosibirsk, Russia

Table 1 Prevalence rates of HBsAg and anti-HCV antibodies among various population groups

Group	*No*	*Mean age (years) (SD)*	*M/F (%)*	*HBsAg (%)*	*HCV (%)*	*Both markers (%)*
School	423	15.5 (0.1)	43/57	2.1	2.6	0.2
Medical college	103	19.4 (0.1)	9/91	0	2.9	0
Medical university	173	21.4 (0.2)	23/77	3.5	6.4	0.6
Adults	374	42.0 (0.5)	43/57	2.4	5.3	0.8
Donors	4552	NA	66/34	1.1	2.1	NA

NA = data not available.

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Accepted for publication 17 August 2001

Antimicrobial resistance among *Neisseria gonorrhoeae* isolates from Ulaanbaatar, Mongolia

EDITOR,—We read with interest "The antibiotic susceptibility of *Neisseria gonorrhoeae* isolated in Ulaanbaatar, Mongolia" by Lkhamsuren *et al.*[1] We also found high levels of resistance to penicillin, tetracycline, and ciprofloxacin. Of the 13 isolates which were successfully transported to our reference laboratory in Birmingham, Alabama, seven (54%) were PPNG, 3/13 (23%) were chromosomally resistant to penicillin, 2/13 (15.4%) were chromosomally resistant to tetracycline and 3/13 (23.1%) were resistant to ciprofloxacin with minimum inhibitory concentration (MICs) equal to 1.0 mcg/ml. However, we would like to clarify that although on site susceptibility testing in Ulaanbaatar using disk diffusion suggested resistance to ceftriaxone in some isolates,[2] this was not confirmed by MICs.[3] We agree with the authors that antibiotic resistance is a significant problem in Ulaanbaatar and that a surveillance system for antimicrobial resistance is needed.

J R SCHWEBKE
S H VERMUND
University of Alabama at Birmingham
703 19th St. South
Zeigler Research Building #239
Birmingham, AL 35294–0007 USA

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Accepted for publication 30 August 2001

Dangers of the sexual health strategy

EDITOR,—The long awaited strategy for sexual health[1] promulgates some shibboleths and proposes some targets, which may increase sexually transmitted diseases and associated suffering.