

MATTERS ARISING

Heterosexual transmission of HBV in Caucasians attending a Genitourinary Medicine clinic

It was with interest that we read the letter by Daniels *et al.*,¹ concerning the heterosexual transmission of hepatitis B virus (HBV) and its acquisition abroad.

It is widely accepted that homosexual and bisexual men attending genitourinary medicine clinics may have a high prevalence of serological markers though the difficulty in screening and immunising this risk group was shown by an interesting audit.² However, vaccination of these risk groups in areas of low endemicity has been found to be ineffective in reducing the overall rates of infection. As highlighted in the letter, there is a need for a heightened awareness of testing in our clinics of heterosexual people who may not necessarily be perceived as being at risk from hepatitis B infection. This is demonstrated by the three family groups who were seen recently in our Liverpool clinic. It is our policy to offer serological testing for syphilis, human immunodeficiency virus and hepatitis B to all our new clinic attenders.

Family A: A 34 year old Caucasian female, married for 15 years, with no history of injecting drug use or other sexual partners, was seen with a history of vaginal discharge. Routine screening showed positive hepatitis B surface antigen (HbsAg) and positive hepatitis B core antibody. Her 34 year old husband had serology consistent with past hepatitis B. A detailed history failed to reveal any other risk factors. Two of their children had serological findings similar to their father's whilst a third child was non-immune (who since then has been immunised to prevent accidental horizontal transmission). A fourth child, a 14 year old female, was positive for hepatitis B e antigen (HBeAg). She showed elevated transaminases and liver biopsy confirmed chronic active hepatitis. She failed to respond to treatment with interferon alpha.

Family B: A 36 year old heterosexual Caucasian male, married for 12 years, was referred to as an HbsAg positive individual and shown subsequently to be HBeAg positive. No definite source of infection could be identified except for a history of tattooing 20 years previously in Birmingham. Testing his 39 year old wife showed serology consistent with past hepatitis B infection. None of their children had any viral markers and have been offered immunisation.

Family A and B highlight the problems of source identification and hence difficulty in the targeting of immunisation strategies.

Family C: A 44 year old Chinese heterosexual male cook, resident in the UK for the last 20 years, married for 23 years to a British born Chinese girl, came for a routine check. Clinical examination revealed penile folliculitis only. Serology showed him to be HbeAg positive. He admitted to several extra marital contacts (usually Chinese girls in the UK and abroad) with no other risk factors. Liver biopsy confirmed chronic active hepatitis and he was treated with interferon

alpha. Testing his wife revealed a past hepatitis B infection but markers were absent in their four children who have been immunised subsequently.

Family C derives from a country with high endemicity for HBV. Recognition of a highly infectious sexually active adult allowed for proper counselling to prevent transmission.

Again, a community based approach acting through the family at the primary health care level is required to combat the infection among this population.

Clearly there is a need for careful monitoring of heterosexual transmission at present. The question at present is whether a subgroup of heterosexual clinic attenders would benefit from hepatitis B immunisation or whether it should be offered to all genitourinary medicine clinic attenders.

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1 Daniels DG, Barton FC, Boag FC. Heterosexual transmission of HBV in Caucasians attending a Genitourinary Medicine clinic. *Genitourin Med* 1991;67:519-24.

2 Bhatti N, Gilson RJC, Beecham M, *et al.* Failure to deliver hepatitis B vaccine: confessions from a Genitourinary Medicine clinic. *BMJ* 1991;303:97-100.

Oral sex and recurrent vaginal candidiasis

Markos *et al.*¹ suggest that orogenital sex may be an important factor in recurrence of vulvovaginal candidiasis. Their study showed that orogenital sex was more commonly practiced by couples, where the woman was afflicted by recurrent vaginal candidiasis, in comparison with a control group from their genitourinary clinic attenders. There are, however, other explanations for their findings.

Since superficial dyspareunia is a frequent problem in women with recurrent vaginal candidiasis it is probable that, in couples so afflicted, orogenital sex becomes an alternative to vaginal intercourse as a painless method of sexual expression. Their findings could be explained purely on this basis.

Furthermore their study did not control for socioeconomic status. A study of approximately 2,000 sexually active females in London has demonstrated a greater frequency of orogenital sex amongst Caucasian women and women of higher socioeconomic status (Radcliffe KW—unpublished data). Therefore any study such as this needs to be controlled for these variables.

For these reasons we do not believe that the authors' findings necessarily support their conclusion that orogenital sex is a cause of recurrent vaginal candidiasis.

Whether "reinfection" with particular pathogenic strains of candida is part of the aetiopathology of recurrent vaginal candidiasis is unclear.² Clarification of this will need careful prospective studies. Severe recurrent vaginal candidiasis can be a cause of much stress on relationships. Adding to this, by blaming the male partner for "reinfection" and depriving a couple of what may be their main source of sexual expression, may cause more problems than it solves.

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1 Markos AR, Wade AAH, Walzma M. Oral sex and recurrent vulvovaginal candidiasis. *Genitourin Med* 1992;68:61.

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HIV infection in Tirupati, India

In their sero-surveillance study of "high risk group" individuals for the prevalence of HIV infection at Tirupati,¹ 7050 high risk group individuals, namely 4957 STD clinic patients (3594 males and 1363 females), 1195 blood donors (1144 males and 51 females), 54 female prostitutes, 820 ante-natal cases and 24 contacts of HIV infected cases were screened.

Out of 7050 samples screened, 50 were sero-positive (0.71%). Among 3594 male STD patients, 31 (0.86%) were sero-positive. However, among 1363 female STD patients who were either contacts or wives of male STD patients, no HIV sero-positivity was detected. In contrast to this, a high prevalence of HIV infection was found among 14 (25.92%) of 54 female prostitutes tested.

These figures clearly indicate that the prostitutes in Tirupati may act as a reservoir of HIV infection and may transmit the disease to their clients who could be Hindus visiting Madras or the sacred temple in Tirupati in India from most parts of the world including the UK. This could lead to further dissemination of the disease.

I feel that most pilgrims and holiday makers from UK are unaware of the prevalence of HIV infection in Tirupati and some men may indulge in casual unprotected sex with an infected prostitute and acquire the infection.

It is therefore mandatory that Hindus from UK, USA, Canada, Australia and other European countries should be made aware of the prevalence of the infection in these areas and thus not indulge in casual unprotected sex. This may perhaps be implemented by publishing information in the lay press to which many Hindus have greater access.

I wondered whether it would be feasible for the Government of India to print posters indicating the prevalence of the infection in these areas, thereby increasing the awareness of the general public.² These posters may be displayed in public places such as hospital waiting areas, railway stations, central bus stations and crowded city centres etc, possibly avoiding the sacred areas like Thirumalai.

Ideally specialist medical practitioners with an interest in HIV infection would be trained in India, as in the UK³ and the other parts of the western world. Only then will a cohort of dedicated physicians be able to influence the attitude of the society and government to take effective control measures to limit further morbidity and mortality from HIV disease.

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2 Control of Sexually Transmitted Diseases. World Health Organisation 1985.

3 Kinghorn GR. The genitourinary physician and AIDS. *Genitourin Med* 1990;66:2-4.