

world (*J R Coll Gen Pract* 1988; **38**: 500-502) make it difficult for them to discuss sexual practices. In this paper an important risk factor in human immunodeficiency virus (HIV) infection is presented — alcohol. There are three main factors postulated: the immunosuppressive and behavioural effects of alcohol and its association with intravenous drug abuse.

In American studies of openly homosexual men 29% have been designated as having alcohol problems by the Michigan alcohol screening test. Although these figures are questionable, either because of self under-reporting or, over-reporting owing to the use of a population drawn from a club and pub social life, they are certainly disturbing.

The immunosuppressive effects of alcohol are well chronicled with both antibody and cell mediated immunity depressed, especially in the presence of liver disease (hepatitis B is also more com-

mon in this population). Lymphopenia of 1.5×10^9 cells per litre has been shown in 23% of people who have been recently intoxicated. The functional characteristics of the T-cells were also affected with a decreased rate of bacterial clearance by microphages.

Alcohol can destroy any thoughts of safe sex. People are less likely to use condoms when intoxicated and may go further in the sexual act than they might when sober. Early results from California suggest that homosexual men who have decreased their alcohol intake have also decreased or stopped anal intercourse. Since alcohol in pubs and discos is so much a part of the homosexual lifestyle then the commonsense conclusions drawn by this paper seem important. Those people most likely to be engaging in unsafe sex are most likely to be drinking excessive alcohol.

Many intravenous drug abusers also abuse alcohol in a package deal of

substance abuse and HIV in drug abusers is emerging as one of the threats to the heterosexual population.

What does this mean to the general practitioner? General practitioners may find alcohol abuse an easier problem to broach than homosexual practices with the population most at risk, the heterosexual and homosexual men and women aged 16–35 years. A whole person approach to these people, looking at them physically, psychologically and socially, including both alcohol and risk behaviours, may break down the barriers between people at risk of HIV infection and their general practitioners.

(J.A.)

Source: Molgaard CA, Nakamura C, Hovell M, *et al.* Assessing alcoholism as a risk factor for acquired immunodeficiency syndrome (AIDS). *Soc Sci Med* 1988; **27**: 1147-1152.

Contributors: Frank Sullivan, Glasgow; Colin Bradley, Manchester; Charles Daly, Co. Waterford; Jonathan Anderson, Glasgow.

INFECTIOUS DISEASES UPDATE

Chemoprophylaxis against meningococcal infection

A working party has recently looked at the control of meningococcal disease.¹ The rationale for chemoprophylaxis is to try and eliminate carriage in household members and other close contacts thus reducing the likelihood of transmission of a strain which has shown itself to be virulent. It should be noted that the whole contact network should be treated simultaneously and this includes recent convalescent patients who may still be carriers. Rifampicin is the antibiotic of choice unless the responsible organism is known to be sensitive to sulphadiazine.

Chemoprophylaxis can also be used to treat asymptomatic infected individuals who may be about to get disseminated infection. This of course will only be effective while treatment is continuing. Penicillin is a more reliable drug than rifampicin in this case although rifampicin may have some effect. Protection is only afforded while treatment continues.

The third aim is to prevent susceptible contacts from becoming colonized with organisms. This can only be effective while prophylaxis continues.

Whenever chemoprophylaxis is used it is essential that it is given as soon as possible after the index case presents. The ideal target population is difficult to define. People who have been sleeping in the same household or dormitory as the case should be included but a few reports suggest extended family members, close neighbours,

party guests or contacts in day care centres may also be at risk. The number of cases involved in an outbreak can also influence how widely prophylaxis is distributed. For example, in Scotland recently, a whole school with 600 pupils was given prophylaxis after six cases and one death had occurred over a short space of time. It is generally accepted that swabbing to identify carriers is of little value except to identify current local strains, and it may cause anxiety when the expected 5–10% or more of 'normal' carriers are identified and the exercise may delay instituting effective chemoprophylaxis.

Psittacosis

In some parts of the country there has recently been an increase in psittacosis which is a chlamydial infection commonly contracted from infected domestic pets. The contact history often leads to the diagnosis as when a recently purchased budgerigar dies with a diarrhoeal or coryza illness. The presentation in humans is usually with pyrexia and little else in the way of other symptoms or signs. There may be a slight cough, usually unproductive, but rarely are there abnormalities on examination of the lungs. Radiography reveals consolidation commonly involving part of a lobe and perhaps with a circular rather than a lobar or lobular appearance. Oral erythromycin is effective treatment with tetracyclines as a second choice. Diagnosis is made serologically but it may be a week or two before the titres rise after the acute infection.

Glandular fever

Like many terms introduced before the responsible infecting agents were discovered this term sometimes serves only to confuse. The clinical syndrome of fever, generalized lymphadenopathy and perhaps hepatitis or splenomegaly can have a number of causes. Traditionally the three major infectious organisms to consider are Epstein-Barr virus, *Toxoplasma gondii* and cytomegalovirus. Serological diagnosis for toxoplasma and cytomegalovirus has long been available although its interpretation may need discussion with the reporting laboratory. It is not so widely known that reliable serology is available for Epstein-Barr virus infection and detecting immunoglobulin M antibody is now the diagnostic method of choice. The non-specific monospot or Paul Bunnell tests may be useful for preliminary screening but are becoming outdated.

Reference

1. Public Health Laboratory Service meningococcal infections working party, Communicable Diseases Surveillance Centre. The epidemiology and control of meningococcal disease. *Weekly Report* 24 February 1989/08.

Suggestions for topics to include in future updates are welcomed and should be passed to the contributor, Dr E. Walker, Communicable Diseases (Scotland) Unit, Ruchill Hospital, Glasgow G20 9NB (041-946-7120), from whom further information about the current topics can be obtained.