

## **An Occasional Medical Newsletter from The Blood Care Foundation**

Dear Member,

This is the third of an occasional series of newsletters to draw your attention to items which have recently appeared in the Medical Literature and which may well have some bearing on the medical precautions you take during your travels. I have culled those facts which I believe are important, but to which you may not have had access. The source of each item is given at the end in italics.

### **Hepatitis B**

Between 5% and 10% of the population have failed to develop immunity after full courses of the currently available Hepatitis B vaccines. These people remain susceptible to contracting the disease. A new third generation genetically engineered vaccine, produced by Evans Medical, has been tested by the Academic Unit of Travel Medicine at the Royal Free Hospital. 100 healthcare workers, who had a history of failing to produce antibodies after at least 4 doses of a currently licensed Hepatitis B vaccine, were given doses of the new vaccine. 69 became immune after a single dose and one more produced an acceptable immune response after a second dose. (*BMJ* 1997;**314**:329-333)

### **HIV**

Multiple drug therapy for HIV must be viewed in the context that 90% of those infected with HIV live in countries where anti-HIV drug treatment is too expensive to be provided. For most people prevention remains the only practical strategy. (*New Engl.J.Med* 1996;**335**:1142-3)

### **Malaria**

MASTA and the London School of Hygiene and Tropical Medicine have reported the results of a survey conducted between November 1993 and February 1995. A questionnaire was sent to all those travellers who had consulted the MASTA helpline and those reporting side effects from taking malarial prophylaxis were interviewed on the telephone. Although there were equal numbers of side effects reported in both the mefloquine (Lariam) and the chloroquine/proguanil groups, those in the mefloquine group were more likely to be of a moderately severe neuropsychiatric nature. The most common of these symptoms were confusion, nightmares, hallucinations, alterations in sleep patterns and loss of concentration. The group sizes were large, 1214 and 1181 respectively. Following this report, the Committee on Safety of Medicines issued a warning that mefloquine should not be prescribed to anyone with a history of depression or epilepsy. (*BMJ* 1996;**313**:525-8 and *Hospital Doctor* 5 Sept. 1996.)

Hopes that the malaria vaccine, SPf66, would offer widespread protection were dashed following publication of the results of a study in over 1,300 children over a period of 2 years. The incidence of malaria in children receiving the vaccine was no different from the incidence in the control group. (*BMJ* 1996;**313**:644)

Although the long term treatment of rheumatic patients with chloroquine has been known, since 1959, to cause retinopathy, the doses used for preventing and treating malaria have been considered safe. A recent report from a study of 22 patients in Uganda, referred for failing vision, is a timely reminder that there is a narrow line between the therapeutic and toxic doses. (*Tropical Doctor* 1997;**27**:10-12)

### **Chagas' Disease**

Chagas' Disease, also known as Muco-cutaneous Trypanosomiasis, has been widespread in the rural areas of Central and South America. The parasite is carried by a reduvid bug which lives in the thatched roofs of rural dwellings and bites the inhabitants whilst they are sleeping. Until recently 40% of cases occurred in Brazil, but an intensive program of insecticide spraying has led to the virtual elimination of the disease from that country.

### **Chinese Blood Transfusion Services**

On 5th January 1997, the Chinese government issued strict new regulations for blood and blood products. This followed a major problem last year when one of the Chinese Army Transfusion Centres was found to be issuing blood products contaminated with HIV. The government has, on previous occasions, attempted to improve the screening of blood and blood products but, with the exception of one or two major centres, this has had little effect. This latest case has highlighted some worrying aspects. Although the product was found to be infected and banned in April 1996, it was not until 6 months later that the foreign ministry confirmed that the product was contaminated with HIV. About 60 % of China's blood comes from paid donors, in whom the incidence of HIV and hepatitis is high. A recent health ministry survey reported that the incidence of hepatitis C was 40% in paid donors as opposed to about 1% in unpaid donors. Many blood collection centres are run illegally by middlemen, who make no effort to sterilise equipment and routinely reuse needles. (*BMJ* 1997;**314**:93)

### **Cholera**

Cholera is once again becoming a problem, for instance it is now endemic in 35 of 45 provinces in Vietnam. However, researchers in this country have just reported the results of a trial using a cheap and effective oral vaccine, produced in that country. In a trial of 22,653 households the incidence of disease was reduced by 66% in those people who had received 2 doses of the vaccine as compared with those who received none. (*Lancet* 1997;**349**:231-5)

### **Guinea Worm**

The female parasitic worm *Dracunculus medinensis*, or the Guinea Worm, invades the human skin where it can grow to about 1 meter in length. It causes severe irritation and consequent sleeplessness and loss of concentration. The method of treatment is to put a bag of water against the skin to draw the tip of the worm onto the surface and then to slowly draw the worm out, without breaking it, by twisting it round a stick. The World Health Organisation has recently declared Pakistan and Iran as now being free of the parasite. (*BMJ* 1997;**314**:394)

### **Artificial Blood**

A French research group have recently inserted the genes for human haemoglobin into tobacco plants. When the haemoglobin is extracted and purified from these transgenic plants, it is fully functional. It may well be that these plants could become a major cheap and uncontaminated source of human haemoglobin for the future production of cell free oxygen carrying resuscitation fluids. (*Nature* 1997;**386**:29-30)

21<sup>st</sup> July 1997

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