

An Occasional Medical Newsletter from The Blood Care Foundation

Dear Member,

It was nearly two years ago when I sent you my first occasional newsletter and I am now starting my tenth. Little did I realise the problems that would arise during this period to complicate the practice of Transfusion Medicine. I hope that the snippets in my letters have reinforced your confidence in the Foundation's ability to stay abreast of all these developments.

nvCJD

New variant Creutzfeldt-Jacob disease (nvCJD) continues to present new problems within the transfusion community. We are still unsure how nvCJD is spread but the weight of evidence makes it highly unlikely that blood transfusion is a viable route. In spite of this the UK government has decided to ban the use of British plasma for the manufacture of Factor VIII and Human Albumin Solutions. Instead, we will use imported plasma, some of which may come from countries where the risk of HIV, HTLV and hepatitis B and C is much higher. One sometimes wonders as to the workings of the political mind. John Barbara recently wrote an excellent editorial on this subject.

Until now, it has only been possible to make the diagnosis of nvCJD at post-mortem examination. However there is light at the end of the tunnel. De Silva and his colleagues have discovered changes on single photon emission computed tomography (SPECT) analysis which, whilst not entirely specific, could raise the suspicion of the disease in young adults. Another promising procedure is cranial magnetic resonance imaging. A distinctive pattern appears to be emerging in nvCJD. Finally 2 laboratory tests appear promising. Will and colleagues have found that the presence of protein 14-3-3 in the cerebro-spinal fluid is indicative of CJD and Otto's group have found that the serum concentration of the brain specific S100 protein is higher in people with CJD than in normal controls. (*BMJ.* 1998;**316**:717-8, *BMJ.* 1998;**316**:563-4, *BMJ.* 1998;**316**:593-4, *BMJ.* 1998;**316**:577-82)

Kala-Azar

There have been over 430,000 cases of visceral leishmaniasis (kala-azar) in North Bihar in the past 11 years. This figure represents 50% of the reported cases worldwide. Recently, evidence has appeared that the causative organism is becoming resistant to the conventional treatment with sodium stibogluconate. A randomised trial has just been concluded, which has shown that aminosidine given at a dose of 20mg/kg t.d.s for 21 days, has a cure rate of 97%. (*BMJ.* 1998;**316**:1200-5)

Clean Hands

It was Semmelweis who showed that by washing one's hands you reduced the rate of cross-infection. A recent report from New Zealand shows that thorough drying of the hands after washing further dramatically reduces bacterial transfer. The conclusion is that clean, dry hands are reasonably safe. (*Epidemiology and Infection.* 1997;**119**:319-25)

Malarial Prophylaxis

Mefloquine (Larium) has recently had a very bad press with regard to neuropsychiatric side effects. A recently published extensive survey has concluded that mefloquine give greater protection against *P.falciparum* malaria than chloroquine plus proguanil in the high-risk areas of sub-Saharan Africa. The survey also concludes that both regimens have a similar risk of both non-serious and serious CNS adverse reactions when used for prophylaxis. This is a very thorough article and should be read by anyone contemplating a visit to these areas. (*Drug and Therapeutics Bulletin*. 1998;**36** (5):20-2)

Fansidar (pyrimethamine plus sulphadoxine) should not be used for malarial prophylaxis. Not only is there a risk of drug-induced agranulocytosis with prolonged use, but it has other serious side-effects, especially skin reactions such as the Stevens-Johnson syndrome and toxic epidermal necrolysis. (*BMJ*. 1995;**310**:709-14. *Drug and Therapeutics Bulletin*. 1998;**36** (5):24)

Burns

Recent advances in the treatment of burns have invalidated the old prognostic tool of the "Rule of 9s". A recent article from Boston, Mass reports 3 significant risk factors: age over 60, burnt area greater than 40% of body surface, and inhalation injury. The new formula predicts 0.3%, 3%. 33% and about 90% mortality depending on whether none, one, two or three risk factors are present. (*New Engl.J.Med.* 1998;**338**:362-6)

Haemoglobin Measurement

A simple method for measuring haemoglobin levels in rural hospitals and in the field has been developed by WHO. The method compares the colour of a drop of blood placed on a standard sheet of paper with six colour shades in the WHO Colour Scale. Pilot tests performed in the UK, South Africa, Thailand and Switzerland show that this method, which only costs about a tenth of the present one, gives good results. (*J.Clin.Path.* 1998;**51**:21-4)

Medical Emergencies in Flight

Records from 9 airlines that carry over 90% of US domestic passengers show that, in one year, 10,471 medical events occurred amongst 580 million passengers. This gives a ratio of approximately 1:5,540. These episodes included 433 cases of chest pain and 2,316 of faintness. (*JAMA*. 1998;**279**:738)

Brain Food

Homo sapiens originated in Africa about 200,000 years ago. It is postulated that the rapid expansion in the cerebral cortex that made possible the development of language and the manufacture of complex tools required a unique environment, rich in fish to provide the brain specific nutrition. This was found around the freshwater lakes of the Rift Valley. (*Brit.J.Nutrition*. 1998;**79**:319-25)

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