EPILEPSY AND ANTI-MALARIAL MEDICATION

The risk of contracting malaria is high when travelling to some parts of the world, and preventative (or “prophylactic”) medicines are normally recommended to protect the traveller from contracting the infection. It should be noted, however, that these medicines are not 100% effective, and it is important that measures be taken to avoid being bitten:

- Wear long-sleeved clothing and long trousers when outdoors after sunset. Light colours are less attractive to mosquitoes.
- Use insect repellents on exposed skin. Many brands are available.
- Sleep if possible in screened rooms, using a fly-spray to kill any mosquitoes that may have entered the room during the day. Electric vapourisers should be used throughout the night.
- Where the room is not air-conditioned, permethrin-impregnated mosquito nets provide the best protection. Check that there are no holes. Tuck the net under the mattress.

These measures are particularly important in people who have epilepsy, or have a history of epilepsy, because particular problems can occur when taking anti-malarial and anti-epileptic tablets together.

Recommended anti-malarial tablets

- **Proguanil (Paludrine®)** should be taken only when travelling to areas where the malarial parasite is not resistant to the anti-malarial drug chloroquine. This medicine can be obtained directly from your local pharmacy without a doctor’s prescription and the adult dose is 200 milligrams (mg) daily. It should be started one week before arriving in the country where the risk of malaria exists and continued for FOUR weeks after leaving the malarious area.

- In areas where chloroquine resistance occurs, **Malarone®** (a combination of proguanil and atovaquone) is recommended. This medication requires a doctor’s prescription and the adult dose should be started two days before arriving in the country where the risk of malaria exists, then daily while in the malarious area and continue for ONE week after leaving the malarious area.

- Another drug, **doxycycline (Vibramycin®)** is also recommended. This requires a doctor’s prescription. The adult dose of 100mg should be started one week before arriving in the country where the risk of malaria exists, taken daily while in the malarious area and continued for FOUR weeks after leaving the malarious area.
The anti-epileptic drugs *carbamazepine* (Tegretol®), *phenytoin* (Epanutin®) and *phenobarbitone* cause doxycycline to be destroyed in the body more quickly than usual, and can reduce the effectiveness of this anti-malarial medicine. A higher-than-normal dose of doxycycline may therefore be needed if you are taking any of these anti-epileptic drugs. Although there are currently no official guidelines available on how much the dose should be increased, research suggests that twice the normal dose, namely 100mg twice daily, should be sufficient. If you are on an anti-epileptic drug other than carbamazepine, phenytoin or phenobarbitone, the normal dose of doxycycline should be taken, namely 100mg once daily.

*Maloprim®* (a combination of *pyrimethamine* and *dapsone*) is available for use when chloroquine resistance is high, but specialist advice is needed before this is used; your GP can obtain advice from telephone numbers given in the British National Formulary. A vitamin supplement, folic acid 5mg daily, should be taken together with the *Maloprim®* if you are also on phenytoin or phenobarbitone.

Other anti-malarial drugs are *chloroquine* (contained in Avloclor® and Nivaquine®) and *mefloquine* (Lariam®). Chloroquine is a widely used preventative treatment, but mefloquine is often advised when travelling to countries where the malaria parasite is resistant to chloroquine. **People with epilepsy or with a past history of epilepsy should not take either of these medicines because they can cause seizures.** Fortunately, however, these two drugs are no longer recommended as drugs of first choice in the prophylaxis of malaria because the medicines mentioned above have now been shown to be more effective and less likely to cause side effects.

If you are in any doubt, you should discuss these problems with your GP - please show them this leaflet so that they know what advice we have given you.

**Additional note for GPs:** The Hospital for Tropical Diseases in London strongly recommends that advice is sought from a Malaria Reference Centre before prescribing prophylaxis for people with epilepsy, particularly if they are travelling to an area of high risk and marked chloroquine resistance. **Telephone numbers are given in the British National Formulary.**