Chloroquine and Proguanil (Paludrine) to Prevent Malaria

Where are they used?

Chloroquine (Nivaquine, Avloclor) combined with proguanil (Paludrine) is used to prevent malaria in areas where little resistance has developed to their effectiveness. This combination now only works for South Asia (excluding Assam); Central and South America (excluding the Amazon basin); and a few other areas of the world where malaria is relatively uncommon. This combination (or each alone) is dangerously unreliable (but still often and incorrectly used) in sub-Saharan Africa, South East Asia, Amazonia, Papua New Guinea and other Pacific Islands. Chloroquine and proguanil should not be used by travellers to Africa, except by pregnant women in the first trimester of pregnancy. Proguanil is not recommended, or normally available, in the United States.

What are their side-effects?

They are generally regarded as safe and you do not need a prescription in the UK to obtain them. In terms of side-effects, both can give minor stomach upsets, and chloroquine can give occasional headache, dizziness and blurred vision. Chloroquine can make psoriasis worse and should be avoided if there is a history of epilepsy. Prolonged use of chloroquine (e.g. over 5 years) can in rare cases affect eyesight, usually only if you have taken more than 2 tablets per week. If you are concerned, a slit-lamp examination can be carried out by an ophthalmologist. Proguanil should be avoided in those with serious kidney problems. Proguanil can also cause mouth ulcers (common) and both, especially proguanil, can lead to thinning of the hair (less common and usually over a longer period of time). This combination is regarded as safe to take during pregnancy and breastfeeding. It is also safe for children to take.

Current Guidelines from the Advisory Committee on Malaria Prevention for UK Travellers (ACMP) concluded that there were no problems with the long-term use over several years of chloroquine and proguanil.

How should they be taken?

Chloroquine should be taken weekly as two (150mg base) tablets. Proguanil should be taken daily as 2 (100mg) tablets. Both are best taken with food. Start taking chloroquine one week before entering a malarious area, and start taking proguanil 24 hours before entering a malarious area. Continue taking both whilst there and for 4 weeks after leaving.

Dosages: Information listed below comes from the ACMP “Guidelines for malaria prevention in travellers from the United Kingdom for 2003”. Variation in doses does exist between patient information leaflets and other authoritative sources.

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and adults 45kg and over</td>
<td>Chloroquine 150mg base: 2 tablets per week Proguanil 100mg: 2 tablets per day</td>
</tr>
<tr>
<td>Children weighing 25.0 - 44.9kg</td>
<td>1½ chloroquine tablets weekly and 1½ proguanil tablets daily</td>
</tr>
<tr>
<td>Children weighing 16.0 - 24.9kg</td>
<td>1 chloroquine tablet weekly and 1 proguanil tablet daily</td>
</tr>
<tr>
<td>Weight Range</td>
<td>Treatment</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Children 10.0 - 15.9kg</td>
<td>¼ chloroquine tablet weekly and ¼ proguanil tablet daily</td>
</tr>
<tr>
<td>Babies 6.0 - 9.9kg</td>
<td>1/2 chloroquine tablet weekly and ½ proguanil tablet daily</td>
</tr>
<tr>
<td>Babies under 6.0kg</td>
<td>¼ chloroquine tablet weekly and ¼ proguanil tablet daily</td>
</tr>
</tbody>
</table>

Chloroquine is available as a syrup (Nivaquine) for young children as well as tablets. Proguanil is only available in tablet form.

Chloroquine has a number of trade names including: Aralen, Avloctor, Chinamine, Delagil, Imagon, Malariquine, Malarivon, Nivaquine, Plaquenol, Resochin, Sandoquin, Shellyquine, Tresochin.

Savarine is chloroquine 100 mg (base) and proguanil 200 mg in a single tablet. The dose is 1 tablet daily. Savarine may be slightly more effective than the normal combination of chloroquine 2 tablets per week, and proguanil 2 tablets per day. It is not available in the UK, but is commonly used in France.

**Which antimalarials are more effective?**

For most of sub-Saharan Africa, South East Asia, the Pacific Islands and the Amazon jungle mefloquine (Lariam), doxycycline and Malarone are considerably more effective. There are sheets available on each of these drugs.

Remember that you must always take every precaution to avoid being bitten by mosquitoes.

**Further Information and Guidance**


The World Health Organization www.who.int/ith

The Health Protection Agency UK www.hpa.org

The National Travel Health Network and Centre www.nathnac.org

Centers for Disease Control and Prevention USA www.cdc.gov/travel

Travax provided by Health Protection Scotland

In addition the Advisory Committee on Malaria Prevention (ACMP) has been used as a source for sheets on malaria. www.hpa.org.uk/infections/topics_az/malaria. As research and information frequently changes there is not always full agreement between different authoritative sources.

**Copyright © InterHealth**

While InterHealth endeavours to ensure that the information published in this guidance note is correct, InterHealth does not warrant the accuracy and completeness of the material in this guidance note. The information in this guidance note is for information only and should not be used for self diagnosis or self treatment. Readers are always encouraged to seek medical help from a doctor or other competent professional health adviser.