

Chemotherapy of Malaria

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The recent emergence of resistant *Plasmodium falciparum* strains to chloroquine has created major problems in the chemotherapy of Malaria. In East Africa for example there have been increasing reports of chloroquine resistance over the last few years since 1978. Although most of the resistance is still at the RI level, there are now several cases of RII & RIII resistance.

According to the World Health Organization (WHO) resistance is classified into 3 groups i.e.

RI — In this case the parasitaemia clears but there is recrudescence within a week.

RII — There is reduction in the parasitaemia but no clearance.

RIII — No effect of chloroquine at all.

In the chemotherapy of Malaria in chloroquine sensitive areas, this drug should still be used in the recommended dose of 600mg stat then 300mg after 6 hours and then 300mg daily for 3 days. But when

resistance is known or suspected then the following drugs are useful.

1. Quinine — this is given for 7—10 days.
2. Fansidar (pyrimethamine and sulfadoxine combination) is still useful. Since it is long-acting, if the patient is very ill he should be given Quinine initially to get things under control and the given Fansidar 3 tablets at once. Resistance to Fansidar is already well recognised.
3. Tetracycline is useful in resistant cases.
4. Sulphones can be used in resistant cases. This group of compounds is used in leprosy e.g. Dapsone.
5. Other long acting sulfas combined with pyrimethamine are useful.

A clone of resistant parasites may consist of relatively resistant to completely resistant ones. Also of interest is the fact some parasites show less resistance in-vivo as compared to in-vitro tests.