

رتبه اول خارجی Foreign First Winner

Project Title:
Chemotherapy of Malaria

Researcher:
Sornchai Looareesuwan (Ph.D.)

Country:
Thailand

University:
Mahidol



عنوان طرح:
شیمی درمانی مالاریا

محقق:
سورنچای لواری سوان

کشور:
تایلند

دانشگاه:
ماهیدل

Abstract:

With the emergence of multidrug resistant falciparum malaria in Thailand. New drugs and drugs in combination are urgently needed. New antimalarial drugs have been investigated at the Hospital for Tropical Diseases in the recent years. Atovaquone, a hydroxynaphthoquinone, was evaluated and found that Atovaquone alone proved safe and effective. All patients treated had clinical cure, however, one third of patients had late recrudescence (RI). When it was combined with proguanil, the cure rate increased to 100%. This combination is now developed as a fixed drug named Malarone. Artemisinin derivatives such as artesunate, artemether, arteether, dihydroartemisinin are also tested at the Bangkok Hospital for Tropical Diseases. Artesunate and artemether alone with a total dose of 600 to 750 mg. given over 5-7 days produced cure rates of 80 to 95%. Artesunate or dihydroartemisinin suppositories with the dose of 10 mg/kg/day have been proved successfully for the treatment of severe malaria.

The artemisinin derivatives when used in combinations with mefloquine given over 3 days cure rates improved to 95-100%. Dihydroartemisinin alone with a total dose of 480 mg given over 5 days gave a cure rate of 90%. Arteether, a WHO/TDR supported drug, has been evaluated in the hospital and now has been registered for use in severe malaria under the name artemotil.

Other combinations (artemisinin derivatives combined with lumefantrine or doxycycline and mefloquine combined with tetracycline or doxycycline) have also been evaluated with the improvement in cure rates.