

Thesis The Study of Efficacy of Artesunate Combined
 with Doxycycline in Uncomplicated Falciparum
 Malaria

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ABSTRACT

A single-blinded randomize clinical trial was conducted with 48 Thai soldier patient with uncomplicated falciparum malaria, working nearby Thai-Cambodia border. The objective of this study was to determine the efficacy of artesunate combined with doxycycline in treatment of uncomplicated malaria.

The study group was devided into 3 groups, 2 experimental groups and control group. Sixteen patients in the first group received 800 mg artesunate combined with 1000 mg doxycycline for 5 days, 19 patients in the second group, received 600 mg artesunate combined with 1000 mg doxycycline for 5 days, and 13 patients in the third group received only artesunate 1200 mg for 5 days, respectively. There had been a recrudesence of 6 patients, 4 patients on day 21 (3 patients from the first group and 1 patient from the second group), and 2 patients on day 28 and 35,

respectively (both are from the second group). The proportion of recrudescence from three groups were 0.1875, 0.1053 and 0.0000, respectively. The proportion of recrudescence was significantly different between the first group and the third group ($p=0.0496$). Mean fever and parasite clearance time among these three groups were not significantly different. The parasite clearance time were 35.66 ± 11.50 , 36.67 ± 16.5 and 37.69 ± 14.64 hours, respectively. Whereas the fever clearance time were 42.37 ± 31.93 , 42.7 ± 27.26 and 36.69 ± 16.63 hours, respectively.

Two patients presented symptoms from side effect of the drugs, one had mild eyeball pain, another had vomit and diarrhea.

The study review that the treatment with high dose of artesunate alone is successful but in low dose the combination with doxycycline is necessary.

The loading dose of artesunate on day 1 and 2 will decrease number of parasite count rapidly, but due to the short half-life of the drug, a long course treatment to increase the efficacy is preferable.