CLINICAL MANIFESTATION AND TREATMENT OF NON-SEVERE FALCIPARUM MALARIA IN THAI CHILDREN

SUPROTIK GHAGRA

A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER
OF CLINICAL TROPICAL MEDICINE
(TROPICAL PEDIATRICS)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2004

ISBN 974-04-4443-1

CLINICAL MANIFESTATION AND TREATMENT OF NON-SEVERE FALCIPARUM MALARIA IN THAI CHILDREN

SUPROTIK GHAGRA 4638515 TMCT/M

M.C.T.M. (Trop. Ped.)

THEMATIC PAPER ADVISORS: CHUKIAT SIRIVICHAYAKUL, DIP. THAI BOARD OF PEDIATRICS, KRISANA PENGSAA, DIP. THAI BOARD OF PEDIATRICS, CHANATHEP POJJAREON-ANANT, M.Sc.(Trop. Med.), PORNTHEP CHANTHAVANICH, M.D., M.Sc.(M.C.H.), KRIENGSAK LIMKITTIKUL, DIP. THAI BOARD OF PEDIATRICS.

ABSTRACT

A retrospective study was conducted to assess the effects of three different treatment regimens on non-severe falciparum malaria, and to review the clinical features of falciparum malaria in Thai children. A total of 116 children, ages ranging from 11 months to 13 years with uncomplicated falciparum malaria, who had been admitted to the Hospital for Tropical Diseases, Bangkok and Thongphaphum Hospital during the period 1991-2003, were evaluated. Most of the symptoms and signs of non-severe falciparum malaria in children were non-specific. Weakness (88%), headache (74%), chills (58%), hepatomegaly and splenomegaly, other than fever, were commonly found clinical features. Out of 116 patients, 54 cases received quinine (Q) 10 mg base/kg for 4 days, then 15 mg base/kg for the next 4 days, 32 cases received artesunate suppositories 10-19 mg/kg once daily for 3 days followed by mefloquine 25 mg base/kg in two divided doses (AS-MQ); and 30 children received artemether-lumefantrine (AT-L) in a fixed combination (artemether 1.5 mg/kg and lumefantrine 9 mg/kg) at 0, 8, 24 and 48 hours. Both rectal artesunate-mefloquine and artemether-lumefantrine exerted rapid initial therapeutic response. Parasite clearance times were significantly shorter with AS-MQ (50.4 hours) and AT-L (37.5 hours) than with Q (78.5 hours) ($p<0.001$). The mean fever clearance times were also shorter in AS-MQ (41 hours) and AT-L (39.8 hours), than in Q (66 hours) groups ($p<0.05$). The 28-day cure rate was higher in AS-MQ (92%) than in AT-L (71%) and Q (75%) groups. However, there was no statistically significant difference in cure rate among the groups. All three treatment regimens were well-tolerated; no serious adverse effects were observed. AS-MQ is more effective than AT-L and Q, a large scale prospective study to confirm the results of this study is warranted.

KEY WORDS: FALCIPARUM MALARIA/ TREATMENT/ CHILDREN
55 PP. ISBN 974-04-4443-1