

EARLY DIAGNOSIS AND TREATMENT OF FALCIPARUM MALARIA IN CAMBODIAN TRAUMA PATIENTS

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Abstract. Asymptomatically infected patients with falciparum malaria may develop symptomatic malaria infection secondary to injury or surgery. This complication increases the risk for postoperative wound infection and adds to the burden of trauma. The aims of the present study were to investigate the preventive effect of early anti-malaria treatment of *Plasmodium falciparum* infected trauma patients, and to study the validity and accuracy of a rapid test to identify those infected. An open, non-randomized, interventional multi-center, cohort study was carried out at six district hospitals in northwestern Cambodia. Two hundred twenty-two trauma patients was examined for *P. falciparum* by dipstick test soon after injury. The patients testing positive were immediately treated with artesunate-mefloquine. A subset of 108 patients from Pailin, an area considered highly endemic for falciparum malaria, was used for the main analysis. Of 28 *P. falciparum* rapid test-positives, 21 developed symptomatic post-injury malaria despite early antimalarial treatment. The agreement between the dipstick test and blood smear examination was good (kappa 92.5; 95%CI 84.5 - 100). Early pre-operative treatment of parasite carriers does not seem to prevent symptomatic malaria after injury and surgery. The rapid test for falciparum malaria was reliable in early identification of asymptomatic *P. falciparum* infected patients.

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