Artesunate Dosing in Severe Falciparum Malaria

To the Editor—In the past 6 years the largest ever randomized controlled trials in severe falciparum malaria have been reported [1, 2]. Compared with quinine, parenteral artesunate reduced mortality by 22.5% (from 10.9% to 8.5%) in African children (N = 5425) and by 35% (from 22% to 15%) in Southeast Asian patients (N = 1461, of whom 202 were children). The artesunate dose evaluated in the AQUAMAT and SEAQUAMAT trials and now recommended by the World Health Organization (WHO) was 2.4 mg/kg, given twice on the day of admission, followed by 2.4 mg/kg once daily. The 2.4 mg/kg intravenous artesunate dose corresponds approximately to the widely used oral dose of 4 mg/kg per day, which gives maximal parasite clearance rates against sensitive parasites [3]. Kremsner et al [4] now report a comparison of a once daily 4 mg/kg intravenous artesunate dose with the WHO-recommended regimen in African children hospitalized with malaria. Despite the
WHO treatment guidelines, patients can switch to oral treatment as soon as they are able to take food reliably. In children with severe malaria, this is after a mean of 3 doses, which at the time of the AQUAMAT trial cost US $3.3, comprising only 4.9% of the malaria inpatient treatment costs [6]. Minor cost savings should be set against lives saved. The critical question is whether this new regimen would offer any overall benefit to children with severe malaria, and there is nothing in this non-inferiority comparison of parasite clearance rates in children hospitalized with moderate severity infections to suggest that it would.

Notes

Disclaimer. This correspondence reflects the opinions of the authors only. The funders and other organizations had no role in the preparation of the manuscript.

Financial support. The authors are funded by the Wellcome Trust of Great Britain (www.wellcome.ac.uk, grant number 077166/Z/05/Z).

Potential conflicts of interest. All authors: No potential conflicts of interest.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Arjen M. Dondorp,1,2 Richard J. Maude,1,2 Ilse C. E. Hendriksen,1 Nicholas P. Day,1,2 and Nicholas J. White1,2,*

1Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Rajthavee, Bangkok, Thailand; and 2Centre for Tropical Medicine, Nuffield Department of Clinical Medicine, CCVTM, University of Oxford, United Kingdom

References


Received 5 January 2012; accepted 27 March 2012; electronically published 25 June 2012.

*Professor White is co-chair of the WHO Global Malaria Programme malaria treatment guidelines committee.

Correspondence: Nicholas J. White, Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, 420/6 Rajvithi Rd, Rajthavee, Bangkok 10400, Thailand (nickw@tropmedres.ac).