Letter to the Editor

Malaria: blood slides under treatment

Pramod M. Shah(1)

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I have read with great interest the review by Peter Winstanley, ‘Coping with malaria in the face of resistance’, in the December issue of the journal. In his review, Winstanley recommends that, if possible, blood slides should be examined 6-hourly, and a quantitative parasite count done. He also mentions that parasite counts often remained unchanged and may rise during the first 18–24 h of treatment with quinine, and that this is not reliable evidence for drug failure.

I am wondering why a parasite count should be performed 6-hourly if it is not going to influence the treatment. Our present recommendation is to examine a blood slide on the next day. Is there any reason why this should be changed?

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Malaria: blood slides under treatment. Response to Pramod Shah

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I am grateful to Dr Shah for his comments on the frequency with which blood slides should be done during the treatment of severe falciparum malaria with intravenous quinine. I think that this is a matter of ‘counsel of perfection’ versus a practical approach to the patient. Dr Shah is, I think, entirely logical when he questions whether 6-hourly parasite counts are needed on the first day, given that parasitemia is unlikely to change in the first 18–24 h of quinine administration. Dr Shah indicates that his institution measures the parasite count upon presentation and 24 h after the start of intravenous quinine administration. While this would provide insufficient data to estimate parasite clearance times, such measurements are usually a clinical trial tool, and are not needed in standard clinical practice.

However, the artemisinin drugs are being used increasingly for severe malaria, and earlier and more frequent parasite counts may be valuable in the setting of treatment with intramuscular artemether. The intramuscular route (unlike intravenous administration) requires drug absorption for therapeutic effects to be obtained. In the case of artemether, there is concern that very sick children with cerebral malaria (especially those with acidosis) may absorb intramuscular artemether unreliable.1 Parasite counts should fall more rapidly with the artemisinin drugs than with quinine, and so the failure of counts to fall within the first 24 h of intramuscular artemether should probably lead to clinical concern.

REFERENCES


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