LETTER TO THE EDITOR

MULTIRESISTANT MALARIA IN BRAZIL CURED WITH LOW DOSE CLINDAMYCIN

Treatment of falciparum malaria in Brazil is an ever increasing problem.[1, 3, 4] A recent study about high grade resistant **Plasmodium falciparum** to amodiaquine in vivo illustrated the situation.[2].

We report a case of multidrug resistant **P. falciparum** finally cured with a low dose regimen of clindamycin.

A 26 year old male patient (54 kg body weight) was admitted with fever and headache to the SUCAM outpatient clinic in Rio Branco, Acre state, Brazil. The patient recently immigrated from a malaria free area in the South of Brazil to Amazonia. This was his first attack and he denied taking any medication during the preceding four weeks. Amodiaquine treatment was started after diagnosis of **P. falciparum** infection (parasitaemia: 45.150 asexual parasites/μl blood). 600 mg of amodiaquine base was given on day zero, 450 mg on day 1 and day 2 each. No vomiting occurred. Daily parasite counts and clinical examination were performed. On day 2 the symptoms ceased and parasitaemia was 4.665/μl. Parasitaemia further decreased to 240/μl on day 7 (resistance grade II). The oral quinine treatment was administered 500 mg quinine sulfate twice a day for 10 days. Daily thick blood smears and clinical examinations were performed during the treatment period. Within 48 hours after starting quinine treatment no more parasites could be detected. During therapy the patient developed nausea and tinnitus, but he did not vomit. Two and three weeks after start of quinine therapy the patient felt well and no parasites could be seen in thick blood smears. But four weeks after quinine administration he presented fever with 38.8°C and nausea. Thick blood smears again were **P. falciparum** positive (35.640/μl). We gave an oral combination of quinine plus clindamycin. Quinine was administered as shown above for three days and simultaneously 600 mg clindamycin twice a day for three days. Again daily checks were done in the first week. Fever and symptoms ceased two days after starting treatment and two days more parasitaemia cleared. Self limiting, mild side effects were dizziness and diarrhoea. After the first week following quinine/clindamycin therapy weekly checks were made. Asymptomatic recrudescence was detected four weeks after the treatment (2.088 asexual parasites/μl). At this time the patient presented with splenomegaly. We decided to give oral clindamycin alone in a lower dosage but a longer course of 300 mg twice a day for five days to avoid diarrhoea. No side effects occurred. Parasitaemia cleared seven days after initiation of treatment and for the following five weeks parasitaemia did not recrudesce. After the first diagnosis of malaria and during the subsequent period of treatment the patient stayed in Rio Branco, where no natural malaria transmission occurred (R. M. ROCHA, personal communication). A reinfection was therefore impossible. We conclude that clindamycin even in a low dose can be considered as an effective alternative treatment for multidrug resistant malaria in Brazil.

Institute of Tropical Medicine — P. G. KREMSNER
Königin-Elisabeth-Strasse 32.
D-1000 Berlin 19, FRG. — H. FELDMEIER
SUCAM Acre, Brazil — R. M. ROCHA
Department of Chemotherapy, — W. GRANINGER
University of Vienna, Austria

REFERENCES

1. ALMEIDA NETTO, J. C. de; OLIVEIRA, G. S. C. de & SAMPAIO, J. A. A. — Resistência do **Plasmodium falciparum** à associação sulfamídicos-antifólicos na Região Centro-Oeste do Brasil. **Rev. Pat. trop.**, 1: 385-393, 1972.

2. KREMSNER, P. G.; ZOTTER, G. M.; GRANINGER, W. & FELDMEIER, H. — Amodiaquine resistant malaria in Brazil. **Lancet. ii**: 684, 1987.

3. REYS, S. — Infecções maláricas por **Plasmodium falciparum** resistente ao tratamento com cloroquina. Situação no Brasil (1960-1981). **Rev. bras. Malar., 33:** 109-130, 1981.

4. VASCONCELOS, M. A. & ROSARIO, V. E. — Testes de sensibilidade **in vitro** de amostras de **Plasmodium falciparum** da Bacia Amazônica (Brasil). **Rev. bras. Malar., 35:** 21-28, 1983.

EDITORIAL BOARD NOTE:

This is a preliminary result in which there is lack of drug quantification and "in vitro" patient strain drug tests. More research work is needed including controlled drug trials in large population before a definitive acceptance of this therapy. However, there is in this preliminary report valuable clinical information in respect to **P. falciparum** multiresistant drug. treatment.

Recebido para publicação em 4/4/1988.