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ABSTRACT₂

Efficacy and tolerancy of *Artemisia annua* lemonade in treatment of *Plasmodium Falciparum* Malaria of children between 6 months to 10 years at Bahouoc and Bangang Fokam(Cameroon).

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Introduction

Artemisia annua has been reported to be effective against uncomplicated *Plasmodium falciparum* malaria in adults but no clinical trial has been done on children because of the bitter taste of tea, so we use a lemonade form to evaluate the efficacy, tolerability, and acceptability of in children aged between 6 months to 10 years in the Bangangté health district in Cameroon.

Method

The WHO protocol for undertaking clinical trial for antimalarial drugs was followed. Bahouoc and Bangang-Fokam health centers were used for the study. Amongst other criteria, parasite density > 1000/µl of blood was enrolled. The informed consent document was administered. The drugs were prepared by infusion of 5g of dried leaves of *A.annua* in 1L of water sweetened with 200 mg of *Stevia rebaudiana* and given from day 0 to day 6 at the dose of 16.66ml/BW/24h 4 times every 30 minutes . Each patient was followed up to day 28, with the assessment of the parasitological and hematological parameters.

Results

A total of 153 patients were screened, 62 met enrolment criteria 53 were followed up to day 14 but 49 patients completed the trial. Results showed that the geometric mean parasite density (GMPD) of enrolled children was reduced from 1.860 to 35 per µl of blood on day 2 and completely cleared by day 3. There were no ETF (early treatment failure). Analysis on day 14 revealed 3 cases of LPF (late parasitological failure) (6%) and 46 cases clinical and parasitological acceptable response (CPAR) of 94%. On day 28, the analysis revealed 4 cases (8%) of LCF (late clinical failure), 9 cases of LPF (18%) and 36 cases (73.48%) of CPAR. Patients had a mean increase in hematocrit levels (34.8%) on day 0 vs 37.4% on day 28.. The mean temperature decreased. The drug was well tolerated but difficultly accepted by the children under 2 years.

Gametocytemia was not detected during follow up in any of the patients.

Conclusion

We conclude that annual wormwood lemonade is efficacious, and well tolerated.