ANTIMICROBIAL RESISTANCE & INFECTION CONTROL

POSTER PRESENTATION Open Access

P084: Analysis of therapeutic efficacies of amodiaquine-arstesunate and artemether-lumefantrine for treatment of uncomplicated falciparum malaria in Burkina Faso five years a fter their implementation

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From 2nd International Conference on Prevention and Infection Control (ICPIC 2013)
Geneva, Switzerland. 25-28 June 2013

Introduction

Since 2005, Burkina Faso adopted artesunate plus amodiaquine (ASAQ) and artemether-lumefantrine (AL) as first-line treatment for uncomplicated malaria. Despite improvement in that treatment, malaria remains the first cause of morbidity and mortality in the country.

Objectives

This study aimed to analyze the therapeutic efficacies of ASAQ and AL for the treatment of uncomplicated *falciparum* malaria in Burkina Faso five years after their adoption.

Methods

Per-protocol individual data from four randomized clinical trials supported by IRSS-DRO Bobo Dioulasso in 2006, 2008, 2009 and 2010, including 1076 patients with uncomplicated *P. falciparum* malaria, treated with the recommended regimen of AL or ASAQ, were analyzed according to WWARN analytical methods. Patients benefited from a clinical and biological 28-day follow-up and performed on days 2, 3, 7, 14 and 28 to evaluate clinical and parasitological outcomes. Treatment failures have been corrected by PCR.

Results

Using WWARN analytical methods, the unadjusted Kaplan-Meier survival estimates are 76.4% (95% CI (72.5-79.8)) in the AL group (N=544) and 87.1% (95% CI (83.9-89.7)) in the ASAQ group (N=532). After PCR correction, AL was less efficacious than ASAQ respectively 95.8% (95% CI (93.6-97.3)) vs 98.2% (95% CI (96.6-99.1)); OR=0,486 (95% CI (0.217-1.089). There was no significant correlation between the occurrence of recrudescent at day 28 end-point and study year in two groups (coefficient<0).

Conclusion

AL and ASAQ remain effective as treatment for uncomplicated malaria according to WHO recommendations, though AL was inferior in preventing recrudescent for 28-day follow-up.

Disclosure of interest

None declared.

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Published: 20 June 2013

doi:10.1186/2047-2994-2-S1-P84
Cite this article as: Nikiema *et al.*: P084: Analysis of therapeutic efficacies of amodiaquine-arstesunate and artemether-lumefantrine for treatment of uncomplicated falciparum malaria in Burkina Faso five years after their implementation. *Antimicrobial Resistance and Infection Control* 2013 **2**(Suppl 1):P84.

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