Adherence to and acceptability of artemether-lumefantrine as first-line anti-malarial treatment: evidence from a rural community in Tanzania

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 524383
Author(s) Kabanywanyi, Abdunoor M; Lengeler, Christian; Kasim, Prudensiana; King'eng'ena, Said; Schlienger, Raymond; Mulure, Nathan; Genton, Blaise
Author(s) at UniBasel Lengeler, Christian ; Genton, Blaise ;
Year 2010
Title Adherence to and acceptability of artemether-lumefantrine as first-line anti-malarial treatment: evidence from a rural community in Tanzania
Journal Malaria Journal
Volume 9
Pages / **Article-Number** 48
BACKGROUND: Controlled clinical trials have shown that a six-dose regimen of artemether-lumefantrine (AL) therapy for uncomplicated Plasmodium falciparum malaria results in cure rates >95% with good tolerability. MATERIALS AND METHODS: A prospective study was carried out to document the adherence to and acceptability of AL administration. This was undertaken in the context of the ALIVE study, a prospective, community-based, observational study in a rural, malaria-endemic area of Tanzania. Following microscopic confirmation of P. falciparum infection, the first AL dose was taken under supervision, with the subsequent five doses taken unsupervised at home. Patients were randomized to receive a home-based assessment close to the scheduled time for one of the unsupervised doses, but were blinded to which follow-up visit they had been allocated. A structured questionnaire was administered by trained staff and AL consumption was confirmed by inspection of blister packs. RESULTS: A total of 552 patients were recruited of whom 352 (63.8%) were <13 years old. The randomization process allocated 112, 109, 110, 100 and 111 patients to a follow-up visit after doses 2, 3, 4, 5 and 6, respectively. For dose 2, 92.0% of patients (103/112) correctly took AL at 8 +/- 1 hours after dose 1. The remaining doses were taken within four hours of the correct time in 87-95% of cases. Nine patients (1.7%) missed one dose. Blister packs were available for inspection in 548 of cases (99.3%) and confirmed patient-reported data that the previous dose had been administered. Nearly all patients took AL with water (549/552 [99.5%]). Two patients (0.4%) took the drug with food. The dosing pictogram and clustering of tablets within the blister packs was considered helpful by 91.8% and 100.0% of patients, respectively. Overall, 87.1% of patients (481/552) found AL easier to take/administer than sulphadoxine-pyrimethamine (SP) and 87.7% (484/552) believed that AL was more effective than SP. DISCUSSION: Factors contributing to adherence were likely to be helpful packaging, pictorial dosing instructions and patients' conviction that AL is effective. CONCLUSION: Adherence to the dosing regimen and timing of AL administration was very good
Publisher BioMed Central
ISSN/ISBN 1475-2875
edoc-URL http://edoc.unibas.ch/dok/A5842799
Full Text on edoc No;
Digital Object Identifier DOI 10.1186/1475-2875-9-48
PubMed ID http://www.ncbi.nlm.nih.gov/pubmed/20149235
ISI-Number WOS:000275463500002

Document type (ISI) Journal Article, Randomized Controlled Trial