

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/309589994>

Concurrent Infections of Chikungunya Virus with Malaria and Typhoid in Children

Conference Paper · June 2016

CITATIONS

0

READS

25

5 authors, including:



Mwangula Albert

Moi University

2 PUBLICATIONS 2 CITATIONS

[SEE PROFILE](#)



Lizzy Mwamburi

University of Eldoret

46 PUBLICATIONS 76 CITATIONS

[SEE PROFILE](#)



Donald Siamba

Masinde Muliro University of Science and Technology

28 PUBLICATIONS 85 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



proteins for light [View project](#)



Quality standards determination of some selected herbal medicinal products in the Kenyan market [View project](#)

- Concurrent Infections of Chikungunya Virus with Malaria and Typhoid in Children

📅 June 17, 2016, 3:30 - 3:45 PM

📍 BCEC, Meeting Room 208

Authors

A. W. Mwongula¹, **L. A. Mwamburi**¹, M. Mwau², D. N. Siamba³, F. W. Wanyama⁴; ¹Univ. of Eldoret, Eldoret, Kenya, ²Ctr. for Infectious & Parasitic Diseases Control Res. (CIPDCR), Kenya Med. Res. Inst., Busia, Kenya, ³Masinde Muliro Univ. of Sci. and Technology, Kakamega, Kenya, ⁴Univ. of Kabianga, Kericho, Kenya

Disclosures

A.W. Mwongula: None. **L.A. Mwamburi:** None. **M. Mwau:** None. **D.N. Siamba:** None. **F.W. Wanyama:** None.

Abstract

Background: Fever is common medical sign and may result from many different conditions ranging from benign to potentially serious. Children typically get higher and quicker fevers, reflecting the effects of the pyrogens upon an inexperienced immune system. Symptoms and signs of chikungunya virus (CHIKV) infections are quite similar to those of malaria and typhoid fever. Malaria and typhoid investigations are routinely carried out to establish the cause of pyrexia of unknown origin (PUO) and treatment follows with complete neglect of CHIKV infections. Thus, CHIKV fever cases can sometimes be misdiagnosed or occur simultaneously with malaria, typhoid fever or both. **Methods:** This study was conducted to determine the concurrent infections of malaria and/or typhoid fever with CHIKV, among febrile children aged 1- 12 years seeking treatment in Alupe District Hospital, Busia Kenya. Blood smears were prepared for detection of malarial parasites and serum sample for widal test. Serum (1 ml) was stored in cryogenic vials and transported in dry ice to Kenya Medical Research Institute (KEMRI), Centre for Infectious and Parasitic Disease Control Research (CIPDCR) for laboratory testing. Enzyme-linked Immunosorbent Assay (ELISA) and Plaque Reduction Neutralisation Test tests were performed to detect the CHIKV antibodies. **Results:** The median (IQR) age for the febrile children was 54 months and 55.5% were female. Concurrent infection of CHIKV with malaria or typhoid was 9.6% and 7% respectively using the ELISA technique and 10.5% and 9.9% using PRNT technique, respectively. **Conclusions:** CHIKV should be tested for in cases of patients presenting with fever.