

Mass treatment with azithromycin may decrease yaws cases in Ghana

March 22 2018

A single round of total-community treatment (TCT) with the antibiotic azithromycin applied to affected rural communities could significantly decrease yaws among the population one year later, according to study published in *PLOS Neglected Tropical Diseases* by Kingsley Bampoe Asiedu, of the World Health Organization (WHO) and colleagues.

Yaws is a disease which affects mainly children and is diagnosed by the presence of skin ulcers and a reactive syphilis serology, but this can be confused clinically with ulcers caused by other infections, such as a *Haemophilus ducreyi* infection. In 2012, the WHO devised a new yaws eradication strategy, also known as the Morges Strategy, which recommended the TCT of yaws-affected communities using single doses of oral azithromycin followed by ongoing active surveillance and total targeted treatment of cases and contacts.

Asiedu and colleagues conducted a survey of 2,909 schoolchildren before and one year after the TCT intervention in Ghana in order to assess the impact of the mass treatment. The researchers found that the provision of mass azithromycin administration given as a single oral dose of 30 mg/kg and up to a maximum dose of 2 g is effective in reducing both the rates of seropositivity and the presence of serologically positive skin lesions consistent with yaws one year after administration. Azithromycin is also effective against *H. ducreyi*.

While the sample population of schoolchildren did not include the poorest children who may not attend school, the routine surveillance data



from the District Health Information Management System confirmed the overall decrease of yaws-like cases seen in the Ghanaian sub-district one year after the TCT. The authors note that yaws-like lesions caused by *H. ducreyi* or other unknown pathogens may continue to persist after a single-round of mass treatment, and therefore they suggest that it may be necessary to devise new management protocols for non-yaws / non-H. ducreyi lesions following the successful elimination of yaws through TCT.

"Although one round of TCT was unable to stop transmission, we achieved a significant reduction in the disease. With little effort through total targeted <u>treatment</u>, or perhaps another round of TCT, we could possibly end yaws," notes Dr. Cynthia Kwakye-Maclean, Programme Manager of Ghana Yaws Eradication Programme.

More information: Abdulai AA, Agana-Nsiire P, Biney F, Kwakye-Maclean C, Kyei-Faried S, Amponsa-Achiano K, et al. (2018) Community-based mass treatment with azithromycin for the elimination of yaws in Ghana—Results of a pilot study. *PLoS Negl Trop Dis* 12(3): e0006303. doi.org/10.1371/journal.pntd.0006303

Provided by Public Library of Science

Citation: Mass treatment with azithromycin may decrease yaws cases in Ghana (2018, March 22) retrieved 10 April 2024 from

https://medicalxpress.com/news/2018-03-mass-treatment-azithromycin-decrease-yaws.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.