IN THE JOURNALS

Chloroquine-azithromycin combination decreased respiratory, gastrointestinal tract infections

April 2, 2014

ADD TOPIC TO EMAIL ALERTS

Fewer respiratory and gastrointestinal tract infections were found among children treated with chloroquine-azithromycin compared with those treated with chloroquine monotherapy, according to recent study findings published in the *Journal of Infectious Diseases.*

Miriam K. Laufer, MD, of the Center for Vaccine Development at the University of Maryland School of Medicine, and colleagues evaluated children assigned to receive either combination therapy with chloroquine and azithromycin (n=160) or chloroquine alone (n=160) to determine the incidence of respiratory and gastrointestinal infections with each therapy.

Miriam K. Laufer

At least one respiratory tract infection (RTI) was found in 30% of the chloroquine-azithromycin group and 35% of the chloroquine-only group (*P*=.43). At least one gastrointestinal (GI) infection was found in 40% of the chloroquine-azithromycin group and 31% of the chloroquine-only group (*P*=.13).

The chloroquine-azithromycin group had a one-third lower incidence density of RTIs compared with the chloroquine-only group (*P*=.02). The chloroquine-only group had a 26% lower incidence of GI infection compared with the chloroquine-only group (*P*=.04).

Both groups had similar times to first RTI; however, the chloroquine-azithromycin group had a longer time to first lower RTI compared with the chloroquine-only group (*P*=.04). The chloroquine-azithromycin group also had a longer time to first GI infection (*P*=.02) and first diarrheal event (*P*=.03) compared with the chloroquine-only group.

One case of RTI and GI infections could be prevented for every seven children treated for malaria with chloroquine-azithromycin compared with chloroquine only, according to the researchers.

“Adding azithromycin to the treatment of malaria prevented 33% of RTIs and 26% of GI infections in Malawi,” the researchers wrote. “Both respiratory and GI infections were significantly reduced, and the protective efficacy was most significant among infections, such as lower RTIs, that were likely to be bacterial in origin. To our knowledge, this is the most definitive evidence that the use of azithromycin has a detectable, long-lasting benefit in the protection against new infections.”

In an accompanying editorial, **Lori R. Holtz, MD,** and **Philip I. Tarr, MD**, both of Washington University School of Medicine, said that “if expanded use of antibacterial agents is adopted to prevent severe childhood infections without knowing their exact targets, side effects and resistance might soon thwart the advantages they confer on recipient populations.”

For more information:

Gilliams EA. *J Infect Dis.* 2014;doi:10.1093/infdis/jui171.

Holtz LR. *J Infect Dis.* 2014;doi:10.1093/infdis/jui172.

Disclosure: See the study and editorial for a full list of disclosures.