

UGANDA: Antiretroviral Agents and Prevention of Malaria in HIV-Infected Ugandan Children

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A recent study found that certain antiretroviral drugs reduced the risk of recurring malaria in children with HIV infection. The researchers tested the hypothesis that the incidence of malaria in HIV-infected children would be lower among those who received lopinavir-ritonavir-based antiretroviral therapy (ART) than among those who received non-nucleoside reverse-transcriptase inhibitor (NNRTI)-based ART. The researchers conducted an open-label randomized trial in Tororo, Uganda, an area of high-intensity malaria transmission. A total of 170 children aged two months to five years with confirmed HIV-infection participated in the study; 86 children were assigned to the NNRTI-based ART group, and 84 were in the lopinavir-ritonavir-based ART group. Each child received a long-lasting insecticide-treated bed net, a hygienic water-storage container, multivitamins, and trimethoprim-sulfamethoxazole to be taken daily. The children were followed for a median of 366 days. The incidence of malaria was found to be lower among children receiving lopinavir-ritonavir-based drugs than among those receiving the NNRTI-based regimen (1.32 versus 2.25 episodes per person-year) and the risk of a recurrence of malaria after treatment was also lower. More serious side effects occurred in the lopinavir-ritonavir group than in the NNRTI group. The researchers concluded that lopinavir-ritonavir-based ART compared with NNRTI-based ART reduced incidence of malaria by 41 percent, with the lower incidence attributed to a significant reduction in the recurrence of malaria after treatment with artemether-lumefantrine

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