Lopinavir/Ritonavir-based ART vs Efavirenz-based ART for the prevention of malaria in pregnancy



Based on previous research it has been suggested that protease inhibitors might produce potent anti-malaria activity. Malaria during pregnancy is associated with adverse birth outcomes such as spontaneous abortion, premature delivery and low birth weight, while the risk of malaria and adverse outcomes is especially severe for pregnant women with HIV. This randomized study therefore looked at treatment-naïve HIV pregnant women between twelve and twenty eight weeks who were randomised to lopinavir/ritonavir vs. efavirenz-based ART (the current standard of care) to test the hypothesis that a protease inhibitor based ART regimen could be associated with a lower risk of malaria. They then compared the risk of placental malaria between the two regimens for up to one year post delivery. Other outcomes included placental malaria diagnosed using histology, adverse birth outcomes, incidence of malaria and the prevalence of asymptomatic malaria parasites. The final result found that regardless of the testing method used there was no difference between the two ART regimens in the risk of placental malaria, the incidence of malaria, the prevalence of asymptomatic parasitemia, and the risk of adverse birth outcomes.

Natureeba, P. et al. 2014. Lopinavir/Ritonavir-Based Antiretroviral Treatment (ART) Versus Efavirenz-Based ART for the Prevention of Malaria Among HIV-Infected Pregnant Women. Oxford Journal.