Combination antiretroviral therapy effective at reducing HIV resistance in mothers and babies

October 27 2009

In a clinical trial investigating mother-to-child HIV transmission in South Africa published this week in *PLoS Medicine*, Neil Martinson (of the Perinatal HIV Research Unit, Soweto, South Africa) and colleagues find that adding two other antiretroviral drugs to single dose nevirapine - an antiretroviral drug given to women and newborn children during labor and delivery to prevent transmission - is effective in reducing the drug resistance that nevirapine causes when used by itself.

Such resistance can compromise later treatment regimens that include the same class of drug as nevirapine. The researchers report that the combination drug regimen — which involved the addition of a twice-daily dose of zidovudine and lamivudine over several days following a single-dose of nevirapine — is safe and easy to provide, and effective in reducing subsequent nevirapine resistance in both mothers and those babies that are infec ted despite antiretrovirals.

In a related Perspective, Dara Lehman (of Fred Hutchinson Cancer Research Center, Seattle, Washington) and colleagues, uninvolved with the research, say that assuming that there is not a large amount of lurking resistance not detected by the study, the approach may "strike the right balance of a feasible regimen that minimizes resistance" in resource-poor settings where combination antiretroviral therapy may not be available for longer-term use in pregnancy.

More information: McIntyre JA, Hopley M, Moodley D, Eklund M, Gray GE, et al. (2009) Efficacy of Short-Course AZT Plus 3TC to Reduce Nevirapine Resistance in the Prevention of Mother-to-Child HIV Transmission: A Randomized Clinical Trial. PLoS Med 6(10): e1000172. doi:10.1371/journal.pmed.1000172

Source: Public Library of Science (news : web)