# Starting ARVs Soon After Birth Can Vastly Reduce HIV Reservoir

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Treating HIV-positive infants with an aggressive regimen of antiretrovirals (ARVs) shortly after birth can greatly reduce the establishment of the viral reservoir, aidsmap reports. Publishing their findings in Clinical Infectious Diseases, Canadian researchers studied 136 babies who began ARVs within 72 hours of birth because their mothers did not have fully suppressed HIV at birth, had a lack of viral load results or had a history of adhering poorly to ARVs.

The researchers followed up with the infants when they were between 2.5 and 7.5 years old. Twelve of the children had been infected with HIV by their mothers, and out of that group four had sustained viral suppression. Of these four, all received ARVs within 24 hours of birth and achieved virologic suppression between 66 and 189 days after birth.

The four infants tested HIV negative at follow-up through both ELISA and Western blot screens. Even an ultra-sensitive test could not detect any viral load in their bodies. No cell-associated HIV DNA was detected in their peripheral blood, nor was any virion-associated HIV RNA found in their CD4s. There were, however, low levels of cell-associated HIV RNA detected in all the children, and one child had detectable replication-competent virus at a rate of 1 unit per 10 million CD4s.

The researchers stated that interrupting treatment was the only way to determine if HIV had been eradicated or if the children had achieved a functional cure. Such a move poses risks, however: If the virus were to rebound, the viral reservoir could expand and possibly thwart any further attempts at eradicating the virus.

To read the aidsmap story, click here.

To read the study abstract, click here.