Early Viral Suppression Improves Neurocognitive Outcomes in HIV-infected Children

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OBJECTIVES
- Estimate the association between age of viral suppression and school-age neurocognitive functioning among children with HIV infection.
- Determine the association between CPE score of initial ART regimen and weighted average CPE score and school-age neurocognitive functioning in children with HIV infection.

METHODS
- Study Population
- Participants included 396 PHIV+ children.  
- 1984 - 1995 (n=165)  1996 - 2002 (n=231)  
- Estimated Difference* (95% CI) 0.50 (-1.1, 0.5) 0.58 (-1.3, 1.5) 0.61 (-1.0, 0.6)
- Weighted average CPE score by age 5
  - -0.2 (-0.9, 0.5) 0.58 (-1.3, 1.5) 0.61 (-1.0, 0.6)

RESULTS
- Viral suppression during infancy or early childhood is associated with improved neurocognitive outcomes in PHIV+ children.
- Although the association reached statistical significance only for ages 4 and 5, the effect size was consistent across all age groups and may be due to lower numbers in the younger age groups.

CONCLUSIONS
- Viral suppression during infancy or early childhood is associated with improved neurocognitive outcomes in PHIV+ children.
- Although the association reached statistical significance only for ages 4 and 5, the effect size was consistent across all age groups and may be due to lower numbers in the younger age groups.

REFERENCES