



# HIV Treatment Halts Damage to Brain

AVR treatment halts brain damage and reduces damage.

August 13, 2018 By [Benjamin Ryan](#)

---

Not long after an individual contracts HIV, the virus penetrates the brain and begins to cause progressive damage to the volume of the organ as well as the thickness of the cerebral cortex. Antiretroviral (ARV) treatment apparently halts this progression and dials back some of the damage.

Investigators studied 65 people who entered the study soon after they contracted HIV. These participants, 30 of whom started ARV treatment during the study, received multiple MRIs of their brains over time.

The investigators compared the brain scans of the participants with scans of 16 people with long-term HIV infection as well as 19 HIV-negative individuals.

The study authors found that before participants began ARV treatment, a longer time spent with untreated HIV was associated with loss of volume in various parts of the brain. Similarly, more time living with untreated HIV was also linked with thinning of the cerebral cortex.

After individuals started ARVs, the progression of such brain damage stopped, and some small increases in measures of cerebral cortex thickness were seen.

“The findings make the neurological case for early treatment initiation,” says Ryan Sanford, a PhD candidate in the department of biological and biomedical engineering at McGill University in Montreal and the study’s corresponding author, “and send a hopeful message to people living with HIV that commencing and adhering to treatment may protect the brain from further injury.”

---

© 2026 Smart + Strong All Rights Reserved.

<http://beta.docker.poz.com/article/hiv-treatment-halts-damage-brain>