

Mindfulness Keeps CD-4+ T Cell Counts from Declining in HIV Infected Adults

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Researchers from the Department of Psychiatry at UCLA explored the effects of mindfulness meditation training on selected biological markers of HIV-1 progression.

The study tested the efficacy of an 8-week mindfulness-based stress reduction meditation program (MBSR), as compared to a 1-day control seminar, to assay CD4+ T lymphocyte counts in stressed HIV infected adults.

A single-blind randomized controlled trial was conducted with enrollment and follow-up occurring between November 2005 and December 2007. A diverse community sample of 48 HIV-1 infected adults was randomized to enter treatment in either an 8-week MBSR or a 1-day control stress reduction education seminar.

The primary outcome measure was the circulating counts of CD4+ T lymphocytes. Participants in the 1-day control seminar showed declines in CD4+ T lymphocyte counts, whereas counts among participants in the 8-week MBSR program were unchanged from baseline to post-intervention (time x treatment condition interaction, $p=.02$).

This effect was independent of antiretroviral (ARV) medication use. Additional analyses indicated that treatment adherence and class attendance mediated the positive effects of the mindfulness meditation training buffering of the CD4+ T lymphocyte declines.

The findings of this pilot provide an initial indication that mindfulness meditation training can buffer CD4+ T lymphocyte declines in HIV-1 infected adults

Citation: Creswell JD, Myers HF, Cole SW, Irwin MR. Mindfulness meditation training effects on CD4+ T lymphocytes in HIV-1 infected adults: a small randomized controlled trial. Brain, Behavior & Immunity. 2009 Feb;23 (2): pages 184-8. Epub 2008 Jul 19. creswell@cmu.edu