Retrovirology

Poster presentation

Replication of Significant Relationship Between MIP-1β Production Following p24 Stimulation and Type C Coping

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Background

We have shown that the Type C style of coping with stress (diminished ability to recognize and express stress/ distress/emotions) is related to HIV progression. We recently found in a study of 50 HIV+ patients in Baltimore, that stronger Type C coping is associated with decreased production of beta-chemokines that bind to the HIV co-receptor CCR5. Under the aegis of NIH, we have initiated a longitudinal study with a final N = 200 to evaluate the core hypothesis that lower production of the beta-chemokines MIP-1 α/β mediates the relationship between Type C coping and HIV progression.

Methods

Type C coping was assessed using Temoshok's Vignette Similarity Rating Method. Measurement of antigen-induced chemokine production from subjects' blood followed methods described in Garzino-Demo *et a. PNAS* 1999. Cells were incubated with media alone (control), p24 antigen, PHA, or candida. Supernatants were collected on day 3 and 6 for beta- chemokine measurements. Assays for MIP-1α/β were performed by commercial ELISA for the first 47 subjects.

Results

Subjects who scored high on Type C coping (3,4,5) had a significantly lower mean stimulation index for MIP-1β by p24, compared to subjects low on Type C coping (2.7 vs. 5.0).

Conclusion

This replication in a separate sample strengthens our hypothesis about mechanisms mediating HIV progression.