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Titel des Beitrags: Therapeutic vaccination with MVA-HIV-1 nef elicits Nef-specific T-helper cell responses in chronically HIV-1 infected individuals.

Abstract: Vaccination is currently considered as an additional therapeutic approach to stimulate HIV-specific immune response in subjects that could not naturally control HIV. Ten chronically HIV infected individuals have been vaccinated with a modified vaccinia Ankara (MVA)-HIV-1(LAI)-nef vector in order to assess safety and immunogenicity. No significant adverse effects were observed during the course of vaccination indicating for the first time that the highly attenuated vaccinia-virus vector MVA is safe in HIV-1 infected individuals. We observed a CD4 T-cell response to Nef in the majority of vaccinated chronically HIV infected individuals. In two subjects CD4 T-cell response was directed to previously unidentified Nef epitopes. The strong Nef-specific CD4 T-cell response elicited by MVA-nef vaccination provides a rationale for immunotherapeutic interventions in HIV infected individuals with suppressed CD4 T-cell responses. Moreover, the CD4 T-cell response elicited was comparable with that usually detected in long-term non-progressor (LTNP) suggesting an improvement in the immunological status of the vaccinated subjects. Furthermore, the new putative CD4 epitopes described here hold promise as important tools for epitope-based vaccination.

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