

LETTERS TO THE EDITOR

Emotional deficit as a neuropsychopathological disturbance in HIV infection

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We have been very interested in the article of Castellon et al. (2000) on the neuropsychiatric disturbances present in HIV-infection, which reports results very congruent with those published previously by our research group. Indeed, for many years we have studied psychopathological perturbations (depression and anxiety) as well as more specific emotional dimensions like emotional deficit and loss of control in HIV positive patients.

We observed that very few HIV-positive patients met DSM criteria for major depressive episode or dysthymia; nevertheless, they presented a significantly more depressive and anxious symptomatology than HIV-negative controls. In addition, HIV positive individuals, mainly asymptomatic subjects (stage II, III or IVC2, CDC criteria) presented with more emotional deficit and loss of control than HIV-negative controls (Bungener et al., 1993, 1995). We also observed on the presence of emotional deficit and loss of control in the absence of substantial depression.

We have assessed these emotional symptoms with the Depressive Mood Scale, which takes into account five emotional areas: irritability, anhedonia, expressiveness, sadness and hypersensitivity. From these, two clinically important dimensions can be derived: the emotional deficit dimension, which combines anhedonia and hypoexpressiveness; and the loss of control dimension, which is made of irritability and hyperexpressiveness. These two dimensions correspond to the description of apathy and irritability given by Castellon et al. (2000). The Depressive Mood Scale is completed by a rater after a semistructured interview, and it has the advantage of being made up of objective and subjective items. Some are rated according to the patient's reports, and the other according to the rater's clinical observations.

In an electrophysiological study we showed that emotional deficit was related to a frontal impairment as indexed by the decrease of the P300 amplitude (Bungener et al., 1996b). P300 amplitude was correlated to the emotional deficit, and as reported by Castellon et al., some HIV-

positive patients presented more emotional deficit than the others. This result led us to hypothesize that the presence of emotional deficit could be considered as an early clinical sign of a higher risk to develop cognitive impairment. Castellon et al. (2000) suggest that apathy is common in other neurological disease involving the CNS, and in fact we observed the same emotional profile in other diseases. Patients with Alzheimer's disease (Bungener et al., 1996a) or dystrophic myotony (Bungener et al., 1998) presented significantly more emotional deficit than paired controls.

Besides the involvement of the CNS to explain the presence of emotional deficit we have also considered the possible adaptive function of this emotional deficit. To feel less and to express less is a way for the subjects to protect themselves from the threatening consequences of their disease. This may help explain the effects on the social, professional and affective life of subjects reported by both our studies. The possible overlap of the concepts of emotional deficit and apathy requires further exploration.

REFERENCES

- Bungener, C., Jouvent, R., & Delaporte, C. (1998). Psychopathological and emotional deficits in myotonic dystrophy. *Journal of Neurology, Neurosurgery and Psychiatry*, 65, 353–356.
- Bungener, C., Jouvent, R., & Derouesné, C. (1996a). Affective disturbances in Alzheimer's disease. *Journal of the American Geriatrics Society*, 44, 1–6.
- Bungener, C., Kosmadakis, C., Jouvent, R., & Widlöcher, D. (1993). Emotional and psychopathological disturbances in HIV infection. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 17, 927–937.
- Bungener, C., Lefrère, J.J., Widlöcher, D., & Jouvent, R. (1995). Emotional deficit: An adaptive and evolutive process in HIV infection. *European Psychiatry*, 10, 345–351.
- Bungener, C., Le Houezec, J., Pierson, A., & Jouvent, R. (1996b). Cognitive and emotional deficits in early stages of HIV infection: An event-related potentials study. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 20, 1303–1314.
- Castellon, S.A., Hinkin, C.H., & Myers, H.F. (2000). Neuropsychiatric disturbance is associated with executive dysfunction in HIV-1 infection. *Journal of the International Neuropsychological Society*, 6, 336–347.

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