PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM HIV INFECTION

F. Gray. *Department of Neuropathology, Hôpital R. Poincaré-Faculté de Médecine Paris-Ouest, F-92380, Garches, France*

Involvement of the CNS is frequent in AIDS. It has been shown that 30–60% of all patients with AIDS have neurological symptoms which represent the principal cause of death and disability in that population. Neuropathological studies have further shown that 80–100% of AIDS patients have pathological abnormalities in the CNS.

Most of these complications occur late in the course of the disease, in full blown AIDS. These lesions are multiple, and relate to various mechanisms which are not all completely understood. Apart from opportunistic infections and lymphomas related to the immunodeficiency syndrome, and changes secondary to other general or visceral complications of the disease, a group of lesions have been identified which are thought to result from infection of the CNS by the HIV. Involvement of the white matter was first emphasized. It includes lesions characteristic of productive HIV-infection of the CNS: *HIV encephalitis* and *HIV leukoencephalopathy* which usually harbour characteristic multinucleated giant cells and in which large amounts of viral antigens or genome may be demonstrated. *Vacuolar myelopathy* is characterized by the presence of numerous vacuolar myelin swellings and macrophages in the spinal cord, predominantly in the dorsolateral spinal tracts. Its exact aetiopathological relationship with HIV infection is unclear. It seems likely that factors other than, or additional to, HIV infection may play a role in its causation. Involvement of the grey matter has been described later. *Diffuse poliodystrophy* characterized by reactive astrocytosis, and microglial activation diffuse to the cerebral grey matter was observed in about half of AIDS cases. Neuronal loss, suspected at histological inspection was confirmed by morphometry. Recent studies suggest that neuronal damage may be due, at least partly, to an apoptotic process and is only indirectly related to the viral infection.

On the other hand, although most HIV carriers remain neurologically unimpaired during the pre-AIDS period, examination of brains of asymptomatic HIV-positive individuals who died accidentally suggests that invasion of the CNS by HIV occurs early in the course of the disease, at the time of primary infection. It induces an immunological process including an inflammatory T-cell reaction with vasculitis and leptomeningitis, and immune activation of brain parenchyma with increased number of microglial cells, upregulation of major histocompatibility complex class II antigens and local production of cytokines. Myelin pallor and gliosis of the white matter are usually found and are likely to be the consequence of opening of the blood brain barrier due to vasculitis; direct damage to oligodendrocytes by cytokines may also interfere. These white matter changes may explain, at least partly, the early cerebral atrophy observed, by MRI in asymptomatic HIV carriers. In contrast, cortical damage seems to be a late event in the course of HIV infection. There is no significant neuronal loss at the early stages of the disease, no accompanying astrocytosis in the cortex, and only exceptional neuronal apoptosis.

HIV INFECTION IN PERSONS WITH HAEMOPHILIA: A LONGITUDINAL STUDY OF PSYCHOLOGICAL IMPACT

E. Pasqual Marsettin [1], N. Ciavarella [2], Study Group. [1] *Psychiatric Clinic, Policlinico, Bari;* [2] *Haemophilia Centre, Policlinico, Bari*

Objectives: to evaluate the emotional impact in persons with haemophilia and HIV infection.

Methods: the study included 118 subjects (66 HIV + ve and 52 HIV-ve) from Haemophilia Centres (H.Cs.) of Bari, Florence, Milan, Naples. The assessment was repeated twice, after 6 months, by standardized self-report tests (SDS, STAI-Y, MMPI) and a Questionnaire on Psychological Impact of AIDS. Statistical analysis was performed by using non parametric Wilcoxon and Man Whitney tests.

Results — Questionnaire on Psychological Impact: HIV-ve subjects were fearful and unhappy more than asymptomatic HIV + ve ($p = 03$). All HIV + ve, whether symptomatic or not, have been concerned about their health and minor infection more than HIV-ve ($p = 004$, $p = 02$), both times. Instead the HIV-ve felt reluctant to having factor replacement in higher percentage compared to HIV + ve in the baseline ($p = 003$, $p = 02$). *STAI-Y, SDS:* no differences in mood and anxiety state were found between the HIV + ve, whether symptomatic or not, and the HIV-ve. *MMPI:* the two groups reported a personality profile within the range of normality.

Conclusion: the main findings in our study were:

1) emotional involvement in the HIV-ve; 2) in contrast with literature, no differences were found between HIV + ve, whether symptomatic or not, and HIV-ve in mood and anxiety state.

S34. New developments in crisis intervention and emergency services

Chairmen: H Katschnig, M Phelan

CRISIS HOMES — AN EMERGENCY ALTERNATIVE TO THE HOSPITAL

Russell Bennett. *Mental Health Center of Dane County, Inc., 625 W. Washington Ave., Madison, WI 53703, USA*

The Mental Health Center of Dane County has long been recognized as a leader in providing safe, clinically appropriate and cost-effective alternatives to psychiatric hospitalisation. The Crisis Home Program uses private homes of local families as a place for clients in crisis to obtain support and supervision for a few days. Include are case-studies, as well as data on costs, length of stay, diagnosis and client satisfaction, concluding that a Crisis Home program is a useful component in any psychiatric emergency service, appreciated by therapists, family members, funding sources, and (most importantly) by the clients themselves.

The presentation concludes with thoughts as to why more such services do not exist, with proposals on how to transcend such challenges.

MOBILE SERVICES: ACUTE HOME-BASED CARE AND COMMUNITY PSYCHIATRY. RESULTS OF A DATA ANALYSIS USING THE SOUTH VERONA PSYCHIATRIC CASE REGISTER

L. Burti, M. Tansella. *Institute of Psychiatry, University of Verona, Policlinico, 37134 Verona, Italy*

In emergency situations community care has to offer a quick response to urgent requests for help in the client's own environment and with a minimum use of the hospital. Mobile services may fulfill both these requirements. Community treatment teams usually consisting of a psychiatrist, a social worker and a registered nurse provide crisis intervention and resolution, and ongoing care, while remaining available at all times for future emergencies. These services have been refined, extensively studied and publicised by a number of authors and have become the reference approach to emergency home care. Outcome studies have shown that such crisis intervention and

https://doi.org/10.1016/0924-9338(96)88539-7 Published online by Cambridge University Press