CASE REPORTS

Lesson of the week: a new cause of treatable dementia

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Abstract

Case report: a 69-year-old married British man presented with 4 months of falls and confusion. HIV antibody test, performed after exclusion of other diagnoses, was positive. Institution of triple antiretroviral therapy resulted in an almost complete recovery.

Discussion: HIV infection is now far more common than syphilis. It may be highly amenable to treatment and needs to be considered in the differential diagnosis of the older person with dementia.

Keywords: HIV-infections, AIDS–dementia complex, dementia, treatment

Case report

A 69-year-old white British married man presented to his local hospital with a 2 month history of dizziness, confusion and reduced conversation. A CT brain scan showed an enhancing left frontal lobe lesion, consistent with an infarct. A diagnosis of left-sided cerebrovascular accident was made. He was given aspirin, and left hospital with no improvement but still walking.

He was readmitted 2 months later with falls, increasing confusion, and urinary incontinence. He was almost mute and had taken to his bed for some weeks. He had an intercurrent respiratory infection and, in the context of fever, had a single grand-mal convulsion. Notable features in his past medical history were a diagnosis of idiopathic thrombocytopenic purpura, previously investigated with a bone marrow examination and partly responsive to steroids, and a coronary artery bypass graft.

Examination demonstrated generalised rigidity, a non-specific tremor, flexor Babinski responses and pout and grasp reflexes, without myoclonus. Blood tests demonstrated a leukopenia (2.1×10⁹ neutrophils, 1.0×10⁹ lymphocytes), and thrombocytopenia (95×10⁹ platelets). B12, folate and TSH levels were normal and VDRL was negative. NMR brain scan demonstrated disappearance of the previously noted lesion, with generalised cerebral atrophy (Figure 1). CSF was acelluar with a normal protein. Electroencephalogram showed characteristic alpha slow-wave activity, consistent with encephalopathy. A diagnosis of multi-infarct dementia was made.

He was seen by a neurologist who, in a further interview with the patient’s wife, elicited a history of him having lived in Zambia 15 years before and of an extra-marital affair whilst there. For the first time, 5 months into his symptoms, a diagnosis of HIV was considered, and confirmed with a positive antibody test. CD4 lymphocyte count was found to be 24 cells/µl. CSF HIV viral load was over 1 million copies/ml. There was no evidence on CSF PCR of JC, Epstein–Barr, varicella zoster or herpes simplex viruses, Toxoplasma gondii or Mycobacterium tuberculosis.

Treatment with lamivudine, stavudine, and efavirenz was commenced. His mini-mental test score increased during the first week from 1 to 4/30 and reached 15/30 by 6 weeks of treatment. He is now fully mobile and has a mental test on an alternative score of 9/10. He is able to live independently.

Discussion

A case is presented of a 69-year-old man with reversible dementia related to HIV, whose response to highly active antiretroviral therapy (HAART) was dramatic.

The patient was initially felt to have a vascular related dementia, a diagnosis which was consistent with his age and CT and NMR findings. Once it was realised that he had spent time in Sub-Saharan Africa 15 years prior to his admission, the differential diagnosis of his dementia was widened to include HIV.

HIV related dementia is a well recognised neurological manifestation of HIV [1]. Although it may be mild, moderate
HIV related dementia is one of the few treatable forms of dementia and improvement can be impressive, as is the case here. Numbers of older patients with HIV will be increasing as a result of the ageing of those infected in the 1980s [6]. The incubation period can be over a decade. In view of the attention given to testing for syphilis (a disease waning in this age group [7]) when eliciting causes of chronic confusion, we believe that HIV should be included in the differential diagnosis of dementia. Missing the diagnosis leads to death but with the use of effective HIV treatment the consequences of treatment can be dramatic.

Key points

- HIV is now more common than syphilis as a cause of dementia in the UK.
- HIV needs to be considered in the differential diagnosis of all cases of dementia.
- Treatment of HIV may lead to a very considerable improvement in the cognitive functioning of an individual.

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References


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