NEW-ONSET PSYCHOSIS IN AIDS

S. SABHESAN, TONY EDWIN, N. NAMMALVAR & A. NAGESWARI

ABSTRACT

Psychotic symptoms during the course of HIV infection constitute a known complication. New-onset psychosis, diagnosed usually by exclusion of other psychoses, is characterized by distinct constellation of symptoms and a varied clinical course, and has been linked to putative neurotransmitter pathology in cortical neurones. A case of new-onset psychosis in AIDS is discussed and its theoretical and practical importance highlighted.

Key Words: AIDS, new onset psychosis

Neuropsychiatric manifestations constitute a prominent late sequel of Acquired Immuno Deficiency Syndrome and include a wide variety of behavioral constellations. Psychotic symptoms have been described as uncommon, but not rare among these patients (Grant & Atkinson, 1995). New-onset psychosis characterized by the absence of known aetiological factors, is attributed to the direct effect of retrovirus on the brain. Harris et al. (1991) observed that psychosis was the presenting manifestation of HIV infection among 12 out of 32 cases of new-onset psychosis reported since 1981. Occurrence of psychotic symptoms prognosticates a poor outcome (Atkinson & Grant, 1994) and may necessitate early behavioural remediation. A case of new onset psychosis in a HIV patient, in whom the detection of HIV infection was only incidental, is being presented to highlight the potential problems in the clinical management of HIV patients.

CASE REPORT

Mrs. V. aged 26 years was transferred to the Department of Thoracic Medicine, Government Rajaji Hospital, Madurai due to sputum-positive pulmonary tuberculosis and with a history of altered behaviour of three months duration. Gradual onset of social withdrawal marked the beginning of the problem and she ceased to take care of her children, even on compulsion. Failure to take adequate food and food refusal were followed by loss of weight. She harboured persecutory delusions that family members, including her children were planning to destroy her. She was found to be talking to herself and at times, crying or smiling without any provocation. She was responding to voices of 'invisible persons', could see 'dead' persons, and experienced being beaten with a stick or a rope. Later self care also deteriorated, but she never evinced signs of misidentification of people, disorientation of time, or place, forgetfulness of day to day events or gross disturbance of chronological ordering of events. Consistent mood changes were not noted during this period.

She had one episode of nocturnal confusion, about ten days prior to admission. During the episode, she got up from bed during sleep, ran out of the house, and was found partially disrobed, digging mud in the street. She was...
talking irrelevantly and incoherently. She did not identify her family members and was hostile and aggressive when they tried to take her home. She was brought home under force and later, slept off the rest of the night. She was totally amnesic about the episode on the following day and never remembered the same subsequently.

On examination, she was retarded and preoccupied, responding to questions relevantly, in monosyllables. No disturbances of primary mental functions were made out during serial examinations. Her affect was flattened. No formal disturbances of thinking could be identified, but delusions of persecution, delusion of grandeur and delusions that her husband was alive, were present. She remembered his death, which occurred one year ago, but could not understand how he could talk to her. Visual hallucinations occurred both during day and at night. She attributed the tactile hallucination of being beaten, to black magic, because she could not see any of them or any whales on her body. She was afraid of being raped, because she could experience the approximation of the male organ against her genitals. She did not evince proper reality assessment and insight.

There was no family history of mental illness. The patient had a normal development and mature personality with healthy interpersonal relations. Married for six years, she had two children, aged three years and one year and no history of abortions. Her husband was an alcoholic and was promiscuous. The couple had a discordant marriage and the problem was accentuated by the in-laws, but she was always submissive. Her husband died one year previously due to pulmonary tuberculosis and his investigations included a negative VDRL test. Her grief was short lived without any pathological elements. Though ill treated, she continued to live with her in-laws, looking after the children, but was sent home during the early stage of the psychosis, when she began to withdraw and ceased to engage in household activities. Her in-laws felt that the symptomatology was international and manipulative.

The patient was started on tab. trifluoperazine 15 mg per day and tab. diazepam 5 mg at bed time. A skiagram of chest showed an extensive bilateral pulmonary tuberculosis and the pattern aroused the suspicion about the possibility of HIV infection. Serological tests revealed her to be suffering from HIV infection (WHO, 1991) and she could be classified under category 'C' of CDC revised classification system (Grant & Atkinson, 1995). Concurrent anti-tuberculosis therapy was initiated (Ethambutol, Isoniazid, Rifampicin and Pyrizinamide). She exhibited considerable improvement during her stay in hospital. Sleep was restored early and hallucinations began to disappear within a fortnight. The persecutory delusions disappeared and self care improved subsequently. She began to seek her children and to critically look at her experiences. No extrapyramidal symptoms were observed and with the recovery from psychotic symptoms, she was able to cooperate in neuropsychological testing, spread over three sessions.

Trial-Making Test, Bender Gestalt Test, Paced Auditory Serial Addition Test, Colour Cancellation Test, Differences and Similarities Test, Ideational Fluency, Logical Memory, Digit Span, Digit Symbol Substitution Test, Benton Visual Retention Test, Complex Figure learning Test and Paired Associate Learning were used. Impairment was noted in attention, abstraction, visuospatial functions, memory, verbal fluency and speed of information processing.

She was advised to continue antipsychotic and anti-tuberculosis therapy from a regional hospital close to her residence, and to come for review periodically. No recurrence of psychotic symptoms occurred and she was functioning back at her premorbid level at the time of discharge. When she failed to turn up for follow-up, A home visit by a social worker revealed that she had died after a brief illness, about six weeks following discharge. The illness was characterized by high fever, breathlessness, inability to swallow and loss of consciousness. She was reportedly functioning at her premorbid level, till the time she fell ill.

**DISCUSSION**

The diagnosis of a new-onset psychosis
in HIV patient requires the exclusion of other probable causes of psychosis. Serial neurological examination, neuropsychological assessment, haematological investigations and the clinical course justified the exclusion of delirium, substance abuse disorder, neurovascular disturbances, opportunistic infections and neoplasms. The sub-acute onset, absence of clinically significant stresses and consistent absence of affective changes excluded the possibility of other functional aetiological factors in the genesis of psychotic symptoms. The clinical profile, symptomatology and response to phenothiazines evinced a close similarity to schizophrenic illness. The diagnosis of HIV infection in this patient was incidental. The predominant hallucinatory symptomatology, favourable and quick resolution of symptoms and the mild neuro-cognitive impairment typified the new-onset psychosis attributable to HIV infection.

The clinical picture of new-onset psychosis of HIV has been described as evincing an acute or sub-acute onset, delusions, hallucinations, bizarre behaviour, mood disturbances and mild cognitive impairment (Harris et al., 1991). The patients had all the features except that the affect was flattened. The single episode of nocturnal confusion was probably related to organic involvement, as further evidenced by neuropsychological impairment. The cognitive impairment involved multiple deficits and would meet the criteria for HIV related mild neurocognitive disorder (AAN, 1991).

Though symptom control in HIV related psychosis occurred favourably, patients with psychosis and cognitive impairment often died early, as had happened in this patient, though death was attributable to respiratory complications (Grant & Atkinson, 1995). The short term resolutions and restoration of near normal functional status indicated that psychoses was, but an epiphenomenon of synaptic pathology in AIDS (Wiley, 1994). The predominance of hallucinatory/delusional symptomatology, prominent attentional and information processing deficit pointed to a subcortical damage. Though frequently reported, no extrapyramidal symptoms occurred in this case; but then the dose of trifluoperazine was only at a minimal level.

Increasing occurrence of HIV infection in India during the last few years has caused alarm. In all cases of HIV related psychosis, neurocognitive assessment assumes significance because of its diagnosis and prognostic implications.

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