

## HIV Infection Comorbid with Psychiatric Disorders: Five Case Reports

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Received date: Nov 21, 2014; Accepted date: Dec 21, 2015; Published date: Jan 7, 2015

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### Introduction

Acquired immune deficiency syndrome (AIDS) is a neuromedical disorder associated with infection by virus of the retroviridae class known as human immunodeficiency virus (HIV) [1].

Acquired immunodeficiency syndrome (AIDS) which is a global pandemic, was first identified in 1981 and by 2009 it has led to nearly 30 million deaths. Homosexual men are the largest risk group for HIV infection and constitute about two-thirds of the reported cases in the United States. In African countries heterosexual transmission is more common. The next largest group is injection drug users. Heterosexual persons infected sexual intercourse, new-borns infected via placental transmission, and recipients of HIV-contaminated blood transfusions, including persons with haemophilia make up the rest.

According to the data of Turkish Ministry of Health and Social Services in 2012 there were total of 5740 cases (Male: 4093, Female: 1635, Unknown: 12). 1024 of the cases were AIDS disease and 4716 HIV seropositive [2]. The distribution of etiology during 2012 is as follows: The total number of HIV cases is 1024. Heterosexual persons infected sexual intercourse are 368 (35.9%); unknown etiology is 500 (48.8%); homosexual persons infected sexual intercourse are 136 (13.3%); new-borns infected via placental transmission are 11 (1.1%); injection drug users are 6 (0.6%); recipients of HIV-contaminated blood transfusions are 3 (0.3%).

In central nervous system infection of cells primary astrocytes is responsible for neuropsychiatric manifestation. Recent medical advances have begun to alter natural progression of the illness from one of the accelerating deterioration to more chronic course. Many studies have been done to know prevalence of psychiatric morbidity in HIV positive patients and they found high psychiatric morbidity that ranged from 4-60% [3-11]. Among all psychiatric morbidity, depression is one of the most common psychiatric disorders. Depression is 2-4 times more prevalent in HIV in comparison to general population [12-15]. Discovery of the infection has a dramatic psychological impact on the patient, as does the disease relentless progression. The neurotropic of virus itself produces neuropathological changes in deep grey structure whose dysfunction is known to cause depression. Depression often goes undiagnosed and untreated. As many as one in three persons with HIV may suffer from depression. Mario Maj (1990) [16] and Ayuso Mateo (2002) [17] also support this fact that the dramatic psychological impact of the discovery of the infection causes acute stress reaction. Mario Maj (1996) [18] reported that the possible effects of the cognitive impairment related to HIV infection of the brain (psychomotor slowing, forgetfulness and difficulties in concentration are early symptoms of this impairment) may inflate estimates of depression in HIV infected people.

### Cases

First case is 26 years old male who admitted to the hospital in 2014 due to social isolation, suspiciousness, loss of appetite, depressive mood, aggressivity to the objects, self-destructive behaviours, negativism, persecutory delusions, auditory and visual hallucinations for the last 3 months. He had fibril convulsions, 2 epileptic seizures due to viral meningitis during childhood. He was mild mental retardation (IQ: 59). He had history of multiple substance abuses since childhood. He was treated for tuberculosis 3 years ago. He has used bonzai since last year. He committed suicide twice by hanging and strangling. There was no neurological and physical problem. He was found HIV+ four years ago. There was neither parenteral drug abuse nor blood transfusion. His mother told that the patient had experienced anal coitus when he was 13 years old. He was diagnosed substance-induced bipolar disorder (depression with psychotic features). He was prescribed sertraline 50 mg / day PO, risperidone 6 mg/day bid PO, quetiapine 50 mg/day PO, biperiden 2 mg/day PO, olanzapine 10 mg/day IM.

Second case is a 52 year old man, was admitted after a variety of drug overdose in 2012. He lived alone, after taking the pills, he told his friend who brought him to the hospital emergency room and his stomach was lavage. Then he was taken to our inpatient psychiatric unit. He had grown up in Istanbul and retired. He developed depressive symptoms after he learned that he was HIV seropositive 8 months ago. He began ruminating about his HIV seropositivity and how alone and isolated he felt. He worried about potentially devastating complications. He had no psychiatric history until then. Although he was devastated by this knowledge, became acutely depressed, and felt hopeless about his future, he did not seek any individual counselling or begin to see a therapist. He had had series of brief affairs and sexual experiences with men. With a diagnosis of adjustment disorder with depressed mood, he was given venlafaxine XR 150 mg/day, diazepam 10mg/day. He also received brief supportive counselling in the hospital. He rapidly returns to his usual level of functioning.

Third case is a 51 year old man, divorced who was HIV seropositive 5 years ago and hospitalized with diagnosis of bipolar disorder I-manic episode in 2012. He had his first attack at the age of 28. Haloperidol 20 mg/day, biperiden 10 mg/day, chlorpromazine 50 mg /day, quetiapine 900 mg/day, lithium 900 mg/day were prescribed. He was heterosexual. Hyper sexuality during manic phase may probable be the cause of HIV seropositivity.

Fourth case is a 42 years old, single man. He admitted to our hospital with psychomotor excitation, inflated self-esteem, grandiosity, referential ideas, auditory hallucinations (e.g., He was talking telepathically with Holland Queen), insomnia, logorrea in 2012. He abused cocaine for 8 years and cannabis and extasie for a short time.

He did not use any substance or alcohol until 6 years. His first complaints began 10 years ago with insomnia, bizarre behaviours, absurd speech and suicidal thoughts and admitted to our hospital in 2002. He was treated for diagnosed substance-induced bipolar disorder (mania with psychotic features). Then he had hospitalisations in Holland where he went for education and in 1994. At the last admission he was also HIV seropositive. Sodium valproate 1000 mg/day, quetiapine 100 mg/day, haloperidole 20 mg/day, biperiden 4 mg/day were used. He was informed about the result of HIV seropositive. He was cool and calm. His sexual choice may be the cause of HIV seropositive.

Fifth case is a 43 year old man, admitted to our hospital with symptoms of anxiety and depression in 1987. Depressive mood, psychomotor retardation; guilty thoughts and preoccupations were present. He had mutilated his penis due to auditory hallucinations and made a fire in his house and brought to emergency with comatous state. Transfusion was necessary for severe blood loss. After discharge from psychiatric hospital he continued drink alcohol heavily. He killed his wife due to auditory hallucinations. He was hospitalised and treated with the diagnosis of other alcohol induced disorder (with psychotic features) in a forensic psychiatry hospital in Berlin for 2 years. Then he was sent away to Turkey when he was found HIV seropositive. The patient did not know that he was seropositive at the admission to our hospital. He has drunk alcohol heavily, about a bottle per day for 14 years. He went to Germany to work at the age of 26. Maprotiline 150 mg/day was used. His depressive symptoms were gradually decreased. He developed signs of psychological distress, and anxiety. The patient was counselled to accept the reality of the illness. At these years we did not have adequate knowledge about HIV and we isolate the patient in a single room, care for hygiene more. The patient probably got HIV via blood transfusion.

## Discussion

Five cases of psychiatric disorders including substance-induced bipolar disorders, adjustment disorders, bipolar disorder I-manic episode, and other alcohol induced disorder are presented in this manuscript. Psychiatric disorders are relatively common in people with HIV disease and serves to worsen the patient's functional capacities. It was reported that 44% of asymptomatic HIV seropositive persons had evidence of neuropsychological impairment compared with 87% of persons with full-blown AIDS. The prevalence of new-onset psychosis in patient with HIV disease may be as high as 15% [19].

105 HIV positive patients were screened, out of which 39 (37.14%) were suffering from depression on SCID-1. Depression may affect prognosis of HIV disease and it is often under diagnosed. Therefore every HIV positive patients attending the hospital for medical check-up should also be assessed thoroughly for depression and should be treated. Depression should not be seen as understandable consequences of physical illness [20]. To avoid misdiagnosing depression one has to focus on symptoms like persistent low mood, anhedonia, and feeling of hopelessness, suicidal thought guilt and self-reproach. Furthermore dementia and depression can occur simultaneously in patients with HIV infection [21]. Depression is very common in HIV positive patients. It often goes undiagnosed and untreated as it is assumed that depressive symptoms are an inevitable reaction to being diagnosed with HIV. Depression not only causes more suffering in HIV positive patients but also contributes to poor adherence to treatment.

Patients had been psychotic from several days to several months before presentation and the most common symptom was a persecutory, grandiose or somatic delusion. Auditory hallucinations also were common as were anxiety, agitation, formal thought disorder, mood disturbance, bizarre behaviour and cognitive impairment [22].

One of our cases developed signs of psychological distress, including anxiety, depression and interpersonal problems. Initially the patient experienced adjustment disorder with anxiety which results from the acute reaction to learning of the diagnosis. Because of the risk for illness, he became preoccupied with his physical condition. Like hypochondriacal persons, the patient misinterprets normal bodily sensations and seek tests but experience little relief of their anxiety with normal test results.

The degree to which functional impairment is due to depression may be difficult to determine because many symptoms of major depression are also characteristic of the symptoms of early HIV-related dementia and alcohol and substance use which were used by 3 of our patients. A frequent symptom of depression in HIV disease is social withdrawal which may stem from the individuals perceived rejection by the others, his or her growing sense of helplessness and fear of a rapid and disfiguring death.

New Jersey HIV/AIDS Registry and Medicaid examined 8294 individuals and 476 (5.7%) were classified as having schizophrenia and 564 (6.8%) were classified as having major affective disorder. Those with serious mental illness were more likely than other groups to be injection drug users and to have claims indicative of substance abuse [23]. One of our cases was diagnosed bipolar disorder I-manic episode. One was alcohol user and 2 were substance users.

In a study all referrals made to the liaison psychiatric service for HIV and AIDS patients over one year were reviewed. ICD-9 and CDC diagnoses were applied to each case at presentation. Sixty HIV-positive patients were assessed, of whom 35 had affective disorder, which was significantly associated with CDC group IV disease (AIDS). Adjustment reaction was seen in nine patients, paranoid states in six, dementia in four, personality changes in four and paranoid schizophrenia in two. CT scans of the brain were performed on 23 of the patients. 17 of these showed abnormalities. The proportion of registered AIDS patients who were referred was five times the proportion of HIV patients [24].

## Conclusion

The problems caring for patients infected with HIV extend beyond the medical and the psychiatric complications of the disorder [25-26]. Many caregivers develop symptoms of depression and anxiety leading some to burn out. Additionally many health care workers feel conflicted about caring for patients whose life style they believe has contributed to the illness. Depression is very high in HIV positive patients. Therefore every HIV positive patients attending the HIV clinic should also be assessed thoroughly for depression.

## References

1. Grant I, Atkinson Jr JH (2000) Neuropsychiatric aspects of HIV Infection and AIDS. In: Comprehensive text book of psychiatry (7th edn.) Lippincott Williams & Wilkins, Philadelphia.
2. Hacettepe Universitesi (2013) HIV/AIDS Tedavi ve Arastirma merkezi HATAM, Klinik HIZ/AIDS Sempozyumu 22-24 Kasim.

3. Seth R, Granville-Grossman K, Goldmeier D, Lynch S (1991) Psychiatric illnesses in patients with HIV infection and AIDS referred to the liaison psychiatrist. *Br J Psychiatry* 159: 347-350.
4. Catalan J, Klimes I, Day A, Garrod A, Bond A, Gallway J (1992) The Psychological impact of HIV infection in gay men. A controlled investigation and factors associated with psychiatric morbidity. *British Journal of psychiatry* 161: 774-778.
5. Fell M, Newman S, Hems M, Durrance P, Manji H, et al. (1993) Mood and psychiatric disturbance in HIV and AIDS: changes over time. *Br J Psychiatry* 162: 604-610.
6. Gala C, Pergami A, Catalan J, Durbanio F, Musicco M, et al. (1993) The psychosocial impact of HIV infection in gay men, drug users and heterosexuals. Controlled investigation. *Br J Psychiatry* 163: 651-659.
7. Lipsitz JD, Williams JB, Rabkin JG, Remien RH, Bradbury M, et al. (1994) Psychopathology in male and female intravenous drug users with and without HIV infection. *Am J Psychiatry* 151: 1662-1668.
8. Lyketsos CG, Hoover DR, Guccione M, Dew MA, Wesch J, et al. (1996) Depressive symptoms over the course of HIV infection before AIDS. *Soc Psychiatry Psychiatr Epidemiol* 31: 212-219.
9. Madan PC, Singh N, Golechha GR (1997) Sociodemographic profile and psychiatric morbidity in hiv-seropositive defence personnel. *Indian J Psychiatry* 39: 200-204.
10. Mathew C, Nair S, John JK (1996) Psychiatric morbidity in HIV diseased inpatients. *Indian Journal of Psychiatry* 38: 69.
11. Kilbourne AM, Justice AC, Rabeneck L, Rodriguez-Barradas M, Weissman S; VACS 3 Project Team (2001) General medical and psychiatric comorbidity among HIV-infected veterans in the post-HAART era. *J Clin Epidemiol* 54: S22-28.
12. Hintz S, Kuck J, Peterkin JJ, Volk DM, Zisook S (1990) Depression in the context of human immunodeficiency virus infection: implications for treatment. *J Clin Psychiatry* 51: 497-501.
13. Dew MA, Becker JT, Sanchez J, Caldararo R, Lopez OL, et al. (1997) Prevalence and predictors of depressive, anxiety and substance use disorders in HIV-infected and uninfected men: a longitudinal evaluation. *Psychol Med* 27: 395-409.
14. Satz P, Myers HF, Maj M, Fawzy F, Forney DL, et al. (1997) Depression, substance use, and sexual orientation as cofactors in HIV-1 infected men: cross-cultural comparisons. *NIDA Res Monogr* 172: 130-155.
15. Ciesla JA, Roberts JE (2001) Meta-analysis of the relationship between HIV infection and risk for depressive disorders. *Am J Psychiatry* 158: 725-730.
16. Maj M (1990) Psychiatric aspects of HIV-1 infection and AIDS. *Psychol Med* 20: 547-563.
17. Ayuso-Mateos JL (2002) Psychiatric aspect of infection. In: *New oxford text book of psychiatry* (Gelder MG, Lopez Ibor JJ Jr, Andersen NC) (1stedn), Oxford University Press, pp. 1168-1173.
18. Maj M (1996) Depressive syndromes and symptoms in subjects with human immunodeficiency virus (HIV) infection. *Br J Psychiatry Suppl* : 117-122.
19. Heaton RK, Velin RA, Mc Cutchen JA, et al. (1994) Neuropsychological impairment in human immunodeficiency virus infection: Implications for employment. *Psychosom Med* 56: 8-17.
20. Srivastava RK (2012) Comparative Study of Phenomenology of Depression between The HIV Positive Patients Attending HIV Clinic and The Patients Attending Psychiatry OPD. *GJRA - Global Journal For Research Analysis* 3: 155-156.
21. McArthur J, Selnes O (1997) Human immunodeficiency virus-associated dementia. In: Berger J, Levy R (eds.) *AIDS and the nervous system* (2nd ed.) Philadelphia: Lippincott-Raven.
22. Sewell DD, Jeste DV, Atkinson JH, Heaton RK, Hesselink JR, et al. (1994) HIV-associated psychosis: a study of 20 cases. San Diego HIV Neurobehavioral Research Center Group. *Am J Psychiatry* 151: 237-242.
23. Walkup J, Crystal S, Sambamoorthi U (1999) Schizophrenia and major affective disorder among Medicaid recipients with HIV/AIDS in New Jersey. *Am J Public Health* 89: 1101-1103.
24. Seth R, Granville-Grossman K, Goldmeier D, Lynch S (1991) Psychiatric illnesses in patients with HIV infection and AIDS referred to the liaison psychiatrist. *Br J Psychiatry* 159: 347-350.
25. Clark BR, Everall IP (1997) Medical Collegerole of the HIV liaison psychiatrist? *Everall Genitourin Med.* 73: 568-570.
26. Holzemer WL, Corless IB, Nokes KM, Turner JG, Brown MA, et al. (1999) Predictors of self-reported adherence in persons living with HIV disease. *AIDS Patient Care STDS* 13: 185-197.