

The impact of psychiatric disorders on the prognosis of HIV sero-positive patients

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REVISED ABSTRACT

Background

Psychiatric disorders are known to be a bad prognostic factor for patients with various medical conditions. Additionally, it is a common co-morbidity in HIV seropositive patients. In this study we compared the prognosis of HIV infection, in the HAART era, between patients with various psychiatric disorders and patients without psychiatric disorder.

Methods

Retrospective, case control study, comparing 72 HIV seropositive patients with documented psychiatric disease with 76 HIV seropositive patients without diagnosed psychiatric disorder.

Results

Among the patients with psychiatric disorders there were 17 (10.6%) with psychotic disorder (PSY D), 22 (13.75%) with severe personality disorder (PER D), and 33 (22.5%) with substance abuse disorders (SA). There were no significant differences in age, race and male/female ratio between patients. However, there was a statistically significant difference in the CD4 count when HIV seropositivity was diagnosed: Rate of patients with CD4 cell count >200 cells/ml was significantly less in patients with PSY D compared to patients with PER D, SA and NPI (50%, 77%, 100% and 72.5%, respectively). Median CD4 count while detection in patients with PSY D, PER D, SA and NPI was 267, 319, 460 and 330, respectively. Five years after detection, median CD4 count was significantly higher in patients with NPI and SA compared to patients with PSY D and PER D (563, 533, 234, and 349, respectively), and the rate of patients with undetectable viral load under HAART among patients with PSY D, PER D, SA, and NPI was 11.7%, 28.5%, 36% and 68%, respectively (p<0.01 for NPI vs. other groups). Rate of patients with AIDS or AIDS-related death among PSY D, PER D, SA, and NPI was 47%, 41%, 0%, and 7.8% respectively (P<0.01). Two years after presenting to the clinic 16% of patients with no psychiatric disorder, 47% of patients with PSY D, 45% of patients with PER D and 69% of patients with SA did not appear to regular follow up visits.

Conclusions

Psychiatric patients (psychotics and borderline personalities) infected with HIV are being detected late and have a poorer prognosis compared to HIV seropositive patients with no psychiatric disorders. Communication between the HIV physicians and the psychiatrists should be encouraged in order to improve patients' adherence to therapy.

INTRODUCTION

• HIV is very common among patients with psychiatric diseases:

- 5.5% of hospitalized psychiatric patients were HIV+ (Cournos F, et-al: Am J Psychiatry 1991)
- 5.1% of psychiatric patients that were admitted to an acute in patient ward were HIV+ (Ayuso-Mateos JL, et-al: Br J Psychiatry 1997)
- among 2873 psychiatric patients – 7.8% were HIV+ (APA: HIV sero prevalence study of psychiatric patients: 11 peer reviewed studies in north east New York)

• Psychiatric disorders are very common among patients with HIV/AIDS:

- 30-39% of 56 HIV+ had psychiatric disorder (Atkinson JH Jr, et-al: Arch Gen Psychiatry 1988)
- 50% of 2864 HIV+ patients have psychiatric disorder (Bing EG, et-al: Arch Gen Psychiatry 2001)
- 13% OF HIV+ patients have co occurring psychiatric illness (Galvan FH, et-al: J Psychoactive drugs 2003)

• Psychiatric diseases are known to be a bad prognostic factor for patients with various medical chronic conditions:

- Marder SR, et-al: Am J Psychiatry 2004
- Green AI, et-al: Psychiatr Clin North Am 2003

OBJECTIVES - To compare the prognosis of HIV disease, in the HAART era, between patients with various psychiatric disorders and patients without psychiatric disorder.

METHODS

- In a retrospective, case control study, the virological, immunological and clinical outcome of 72 HIV patients with documented psychiatric disorder was compared with matched 76 non-psychiatric HIV patients.
- virological and immunological parameters were taken at diagnosis and five years after diagnosis.
- Inclusion criteria for cases: HIV+ patients that had a diagnosed psychiatric disorder prior to HIV detection.
- PSY D (Psychotic disorders) included schizophrenia and bipolar disease.
- Student T test was used to compare between cases and control. P<0.01 was determined to indicate a statistically significant difference.

Table 1. Patient's characteristics

	No psychiatric disorder	Psychotic disorder	Personality disorder	Substance abuse	Other disorders
No (%)	76 (47.6%)	17 (10.63%)	22 (13.75%)	33 (22.5%)	9 (5.6%)
% male	72%	78%	72.70%	91.70%	
Age (average)	42.8	40.4	40.3	35	
Age (range)	23-74	32-57	29-53	21-56	
MSM	46.50%	63.60%	32%	0%	
HET (israeli natives)	35.50%	17.60%	27%		
HET (African origin)	18%	23.50%	14%		
IVDU	0	17.60%	27%	100%	

Fig 1: Median of CD4 cell count at detection and follow-up

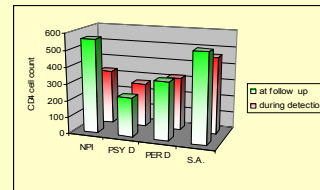
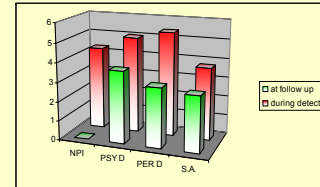


Fig 2: Median Viral Load (log) at detection and follow-up



RESULTS

Among the patients with psychiatric disorders there were 17 (10.6%) with psychotic disorder (PSY D), 22 (13.75%) with severe personality disorder (PER D), and 33 (22.5%) with substance abuse disorders (S.A.). There were no significant differences in age and race between patients (Table 1). However, there was a statistically significant difference in the CD4 count at the time of HIV seropositivity diagnosis: the portion of HIV+ persons with CD4 ≥ 200 among patients with PSY D was significantly less than in patients with PER D, S.A. and NPI (50%, 77%, 100%, and 72.5%, respectively). Median CD4 count on detection was 267, 319, 460, and 330 in patients with PSY D, PER D, S.A. and NPI, respectively (Fig 1). Five years after detection, median CD4 count was significantly higher in patients with no psychiatric disorder and S.A. compared to patients with PSY D and PER D (563, 533, 234, and 349, respectively), and the rate of patients with undetectable viral load under HAART was 11.7%, 28.5%, 36% and 68% among patients with PSY D, PER D, S.A., and NPIs, respectively (p<0.01 for NPIs vs. other groups, Fig 2,3). Rate of patients with AIDS or AIDS-related death was 47%, 41%, 0%, and 7.8% among patients with PSY D, PER D, S.A., and NPI, respectively (P<0.01; Fig 4). Two years after presenting to the clinic, 16% of patients with no psychiatric disorder, 47% of patients with PSY D, 45% of patients with PER D and 69% of patients with S.A. did not appear to regular follow up visits at the clinic.

Fig 3: % HIV+ with undetectable VL at follow up

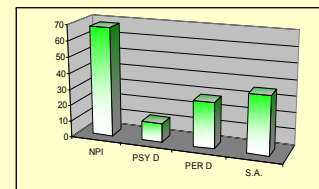


Fig 5. non adherence with medical follow up visits at the clinic 2 years after baseline

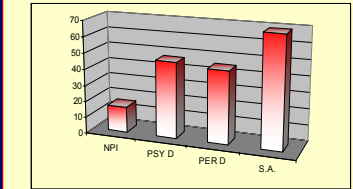
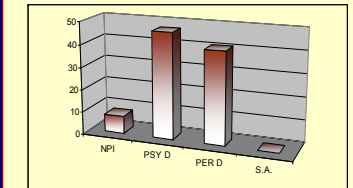


Fig 4. % HIV+ with ARE or death at follow up



CONCLUSIONS

- Psychiatric patients constitute a large portion of the HIV clinic
- Psychiatric patients (psychotics and borderline personalities) infected with HIV are being detected late and have a poorer prognosis compared to HIV sero positive patients with no psychiatric disorders
- Communication between the HIV physicians and the psychiatrists should be encouraged in order to improve patients' adherence to follow up and therapy

Abbreviations:

NPI = no psychiatric illness; PSY D=psychotic disorders; PER D=personality disorders; S.A.=substance abuse