THE HIV-POSITIVE PATIENT IN INTENSIVE CARE – PSYCHOLOGICAL PROFILE

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THE HIV-POSITIVE PATIENT IN INTENSIVE CARE – PSYCHOLOGICAL PROFILE (ABSTRACT). **Aim:** This paper aims to outline the profile of HIV-positive patients in intensive care, in terms of psycho-emotional and vital parameters. **Material and methods:** We evaluated the HIV-positive patients that required intensive care (IC), from January 2011 to December 2013, in the HIV/AIDS Regional of the „Sf. Parascheva” Infectious Diseases Clinical Hospital Iaşi. **Results:** From January 2011 to December 2013, the HIV/AIDS Regional Centre in Iaşi recorded 2649 hospitalizations, of which 0.67 % (18 cases) required intensive medical care. Of these 10 were males and 8 females, aged between 0 and 65 years with a median of 24 years. There were 29 deaths (1.09 % of all hospitalizations), 11 of which in intensive therapy (38 % of all deaths) - 7 men and 4 women. CD4 counts in persons requiring IC care were between 1 and 112/mm³, and most naïve patients who died were late-presenters. The main diseases diagnosed were pulmonary tuberculosis and pneumocystosis, the main cause of death being multiple organ failure. The duration of hospitalization ranged between 4.5 and 30 days. Treatment success rate was correlated with the CD4 and biological status: liver and renal failure, respiratory failure, meningeal coma, hypoproteinemia, diselectrolitemia. From a psychological perspective, patients that arrived in the intensive care showed a history of non-compliance and non-adherence, a personality structure often marked by a lack of respect for them, indifference or ignorance regarding the factors that generate well-being. **Conclusions:** HIV-positive patients in the position of requiring intensive care showed a marked immunological collapse due to abandonment of therapy or late detection. **Keywords:** HIV/AIDS, INTENSIVE CARE, ADHERENCE, ANTIRETROVIRAL THERAPY, PSYCHOLOGICAL PROFILE

The HIV infection is currently considered a worldwide pandemic. Some of the main problems concerning HIV patients are epidemiological, regarding the means of transmission, confections with hepatitis B, C and D, HIV outspread in vulnerable populations (intra-venous drug abusers), viral resistance to antiretroviral therapy (ART), choosing the most adequate ART treatment. At the same time, the medical world is confronting with numerous cases of HIV patients in extreme health conditions, which require intensive care assistance (1).

A patient’s survival essentially depends on the characteristics of the infectant HIV clade (resistance to ART), on establishing an optimal therapeutic regimen and also on the patient’s co morbidities (renal, cardiac,
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diabetes) (2).

Given this general context, we consider the multidisciplinary collaboration between doctors to be essential in order to prevent the adverse events and also to keep track of drug interactions.

In Romania, the “pediatric cohort”, represented by the young people born in 1986-1989 and infected in the hospital, is still the main part of all HIV infected people. However, we have observed in the past years a shift in patients’ morbidity, from the adolescent age to adults and older.

From a psychological point of view, young people living with HIV/AIDS experience a series of particular emotional states: “therapeutic exhaustion” from having grown up with multiple ART regimens, abandonment of therapy, denying HIV status. This has an impact on the overall health status, making patients vulnerable to opportunistic infections that have an increased effect on the weakened immune system (3, 4).

Another situation to be considered is that of patients living with HIV/AIDS that are unaware of their diagnosis, slow-progressers (with a slow increase in viral load and a slow decrease in immunity throughout a long period of time) and late-presenters (HIV-infected patients with a very low immunity, CD4 cell count under 200/mm³) (5). They represent the majority of HIV patients assisted in a medical intensive care (IC) unit.

This paper aims to describe the clinical-biological and psycho-emotional profile of the HIV patient requiring intensive care assistance.

MATERIAL AND METHODS

We realized a retrospective study for a period of 36 months, from January 2011 to December 2013, evaluating HIV positive patients in intensive care. In the mentioned time span, the Infectious Diseases Hospital Iasi reported 28,773 admissions, of which 2649 were HIV infected patients. Of these, 18 HIV positive patients required intensive care (0.67%) (fig. 1).

![Fig 1. HIV patients admitted to ICU in 36 months](image)

We evaluated the viro-immunological parameters at admission, and the clinical and biological status, highlighting organ deficits and failure. We also studied the psychological reports written at admission and at discharge, for patients whose biological status allowed psychological evaluation.

The psychological evaluation consisted mainly in clinical semi-structured interviews that explored the patients’ overall emotional status and their emotions towards the HIV diagnosis.

The demographics revealed 10 male patients and 8 female, with a median age of 32.4 (range 24-65 years).

From the total of 18 cases (100%) of HIV in intensive care, 61% (7 male, 4 female), setting the survival rate 39% (fig 2).

![Fig 2. Gender distribution, and survival rate](image)
RESULTS
In our study, we found that patients were admitted to the intensive care unit (ICU) with the following associated pathology, which revealed the HIV-infection:

- pneumocystis and Kaposi sarcoma – one case;
- generalized tuberculosis and ongoing pregnancy – one case;
- ovary tumor – one case;
- HIV myelitis and encephalopathy – one case;
- cryptococcosis meningitis – 2 cases;
- respiratory failure caused by a pneumocystis jirovecii infection – 5 cases;
- generalized tuberculosis with pleural-pulmonary, ganglionary, meningeal and gastro-intestinal spread – 7 cases.

From an immunological point of view, CD4 cell count varied between 1 and 112/mm^3. Patients were admitted with severe immunosuppression, mainly with respiratory failure due to pulmonary pneumocystosis or pulmonary tuberculosis.

The number of days of hospital admission varied between 4.5 and 32 days in the ICU.

The initial psychological interview was conducted for 16 of the 18 patients in ICU. In 2 cases the severely deteriorated health status did not allow communication. The 7 survivors were evaluated at discharge from ICU and also monitored long term.

The psychological interview was semi-structured; questions regarded general life aspects, the moment of diagnosis and the progression of the HIV disease, coping with antiretroviral therapy, motivations for taking or refusing the ART, family, personal life, projects and life goals.

After analyzing the interviews, we observed two directions in HIV patients.

One category of patients was represented by those that had “given up” on life, deciding to stop taking the ART in order to end life. This form of “suicide” by not taking medication reveals a profoundly melancholic emotional profile, characterized by moderate to severe depression, a sense of being overwhelmed by life and all that society expects from the individual (financially, marital, maternally, educationally). Patients described a wish to “shut down”, to stop existing, and often times to punish those around them (family, friends, and community) for their attitude towards them (rejection, stigma, work exploitation, indifference, and hate).

Another category was represented by the survivors – the patients that found motivation for living and for creating a close to normal existence. This motivation came from different sources – from wanting to take care of their family and children, from getting the support they needed from their parents or their life partner, from wanting to function normally in society, as successful individuals.

Long term psychological monitoring for these survivors revealed an increase in adherence to ART and a change in lifestyle. The motivation found in the ICU acted as psychological support for re-evaluating their life status and for taking the necessary actions to prevent further medical complications.

DISCUSSION
The number of cases in our study – 18 (0.67%) out of 2,649 – could be considered a small sample, when compared to the total number of HIV positive admitted patients. However, the author’s motivation for evaluating the psychological status of the HIV patient in ICU was driven by the complexity of the cases, the medical and human costs, and especially the profound psychological implications of this pathology. The
survival rate of almost 40% encourages long term management and is a solid platform for clinical therapy and for the activity of the infectious diseases doctor and the IC specialist.

The HIV positive patient goes through a series of emotional changes, after the diagnosis. These changes are similar to those described in mourning: first there is denial, followed by anger, negotiation and finally acceptance. This acceptance of the positive status leads to a natural behavior of adherence to ART. However, some of the patient remain trapped in one of these states, and don’t go through all the emotions necessary in order to reach acceptance. In this case they lack the ability or the intrinsic desire to take medication (6).

The Romanian “pediatric cohort” represents a particularly vulnerable population, due to the fact that it is made up of young adults that have spent their childhood and adolescence taking pills and fighting different co morbidities (7, 8, 9).

Adherence in this population is an ongoing problem due to both the long term therapy that causes “therapeutic exhaustion” and to lack of social support to go through all the emotional stages described above.

From a psychological point of view, practice has revealed two opposite attitudes:

1. denial of the disease and all the aspects concerning it, when meeting a new partner, a new group of friends, or in new social contexts; wanting to be like everybody else by NOT taking pills;

2. acceptance of the disease and coping with every-day social challenging situations, having a functional family, healthy children, a workplace etc.; wanting to be like everybody else WHILE taking pills.

Unfortunately, the first category of patients is the most common in ICU, being admitted with different organ failures and opportunistic infections that require intensive care assistance.

For slow-progressers and adult naive patients, the psychological impact is greatly increased by having to cope with a highly stigmatizing diagnosis while in ICU. They find themselves in the position to either give up or find strength and self-motivation to overcome the physical illness and the psychological trauma. Family support is essential in establishing a “safety net” for the patient, in his attempt to overcome the disease.

Also of crucial importance is the psychological support that is offered throughout hospitalization. The relationship that the patient builds with the psychologist is the stepping stone for future adherence to ART (10, 11).

CONCLUSIONS

In our research, we realized that, in order to fully address the needs of the HIV positive patient, the infectious diseases doctor, along with the ICU specialist must collaborate with the psychologist. This allows a multidisciplinary perspective on the patient, and professional support from all sides. It is of great value to identify the patient’s psychological profile and his motivation, thus increasing life expectancy through a high level of ART adherence.

REFERENCES


**NEWS**

**ANTIRETROVIRAL THERAPY AND ACQUIRED RIFAMPICIN RESISTANCE**

According World Health Organization (WHO), in 2013, 13% of new cases of tuberculosis (TB) were HIV positive. Antiretroviral therapy (ART) reduced the risk of TB morbidity and mortality among patients HIV+ (1). A group of researchers from the National Institute for Research in Tuberculosis India have evaluated the impact of ART on acquired rifampicin resistance (ARR) in HIV-TB coinfection. The study group included 574 new pulmonary TB cases with and without HIV (246 TB+HIV-, 212 TB+HIV+ART-, 116 TB+HIV+ART+), receiving a TB treatment regimen which comprised thrice-weekly rifampicin for 6 months. The results showed that the relative risk for ARR was 21.1 (95%CI 2.6-184), p<0.001 for patients TB+HIV+ART- and 8.2 (95%CI 0.6-104), p=0.07 for patients TB+HIV+ART+, compared to patients TB+HIV-. ART reduced the relative risk for ARR among the patients TB+HIV+ by threefold (2). This study sustain the WHO recommendation for ART initiation in all cases HIV+TB+, irrespective of CD4 cell level (1) (World Health Organization. Global tuberculosis report 2013. www.who.int/tb/publications/global_report/en/ ; Narendran G, Menon PA, Venkatesan P et al. Acquired Rifampicin Resistance in Thrice-Weekly TB Therapy: Impact of HIV and Antiretroviral Therapy. *Clin Infect Dis.* 2014. doi: 10.1093/cid/ciu674).