THE PATIENT-DOCTOR-PSYCHOLOGIST TRIANGLE IN A CASE OF SEVERE IMMUNOSUPRESSION IN THE HIV INFECTION

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THE PATIENT-DOCTOR-PSYCHOLOGIST TRIANGLE IN A CASE OF SEVERE IMMUNOSUPRESSION IN THE HIV INFECTION (Abstract). In the last two years the Romanian adult population infected with the human immunodeficiency virus (HIV) has increased due to sexual transmission, both heterosexual and homosexual. The case presented is that of a 33 year-old man, admitted to the Infectious Diseases Hospital in Iasi with acute respiratory failure and a confirmation of Kaposi’s sarcoma. Tests later proved positive for HIV, the patient being included in the stage AIDS C3 (acute immunodeficiency syndrome). The respiratory failure was suspected to be caused by Pneumocystis carinii and cotrimoxazol therapy, oxygen therapy and anti-retroviral therapy were established. He was also referred to the oncology hospital for treatment of Kaposi’s sarcoma. The patient’s adherence to therapy was influenced by a strong doctor-patient relationship, as well as by psychological counseling and support. Creating a functional doctor-patient-psychologist team is key throughout the HIV-positive patient's existence, for supporting long term adherence to therapy and acceptance of the diagnosis. This case highlights the need for a strong psycho-social compartment in every medical center that deals with HIV-infected individuals. **Keywords**: HIV/AIDS, ANTIRETROVIRAL THERAPY, PSYCHOLOGICAL COUNSELING, DOCTOR-PATIENT RELATIONSHIP.

The HIV/AIDS pandemic has reached 36.9 million people globally living with HIV. At the end of 2014, two million people became newly infected with HIV, and 1.2 million people died from AIDS-related illnesses (1).

In Romania, the main characteristic of the HIV/AIDS population is the development of the “pediatric cohort”, represented by HIV positive youth infected as children in the 1990’s (2). This group is currently being equaled in numbers by newly infected cases. The most common means of transmission for these new cases are unprotected sexual intercourse, both heterosexual and homosexual, as well as use of injected drugs (3).

In the North-Eastern part of Romania, in October 2015 there were over 1400 people living with HIV/AIDS, this year being the first in which the number of newly diagnosed adults has equaled that of the
“pediatric cohort”. The infection is transmitted mostly by heterosexual and homosexual unprotected intercourse and less through intravenous administration.

**CASE PRESENTATION**

We present the case of a male patient, born in 1980. This patient was transferred to the HIV/AIDS Regional Center by a local clinic, in August 2013. The reasons for hospitalization were: weight loss, fatigue, impaired general condition, acute respiratory failure, perioronasal cyanosis and of the extremities, with preserved consciousness. At admission, the weight was 53 kg, height 163 cm and 76% partial oxygen pressure.

From the patient’s statements, his weight decreased progressively, 12 kg in 4 months. For the last 10 months, he developed lenticular brown spots on the skin, disseminated on the trunk, abdomen, and the upper right eyelid. There were no significant pathological aspects in the personal and family history. The biological samples from the County Hospital were normal, except for hemoglobin 10.8 g/l, the appearance of “mat glass” of the chest X-ray, and also the positive result for HIV 1 and 2 ELISA test. Upon more in depth interrogations about the patient’s personal history, he identifies the means of getting infected with HIV as unprotected homosexual intercourse.

Viro-immunologic tests show a profound immunosuppression, with CD4 2 cells/mmc (fig. 1) and a viral load (VL) of 518000 copies/ml (fig. 2). The dermatologic examination established the clinical diagnosis of Kaposi sarcoma, confirmed by skin biopsy. Serology for cytomegalovirus (CMV), toxoplasma, hepatitis B and C were negative, with also a negative VDRL. The major suspicion in the context of pulmonary failure was pulmonary pneumocystis, and therapy was initiated with cotrimoxazole 8 tablets / day, intermittent oxygen, decreasing cortisol dose. Antiretroviral therapy immediately instituted was achieved with co-formulations of lopinavir + ritonavir and lamivudine + zidovudine and enfuvirtide (T20 Fuzeon). The pulmonary phenomena remitted extremely slowly, with the possibility of transfer within 30 days in the oncology ward of the county hospital, where specific therapy for Kaposi’s sarcoma was initiated.

The patient, being a university graduate, showed a high level of intelligence and seemed to understand his situation. The infectious diseases doctor managed to create a relationship with this patient based on mutual trust, which encouraged him to own his diagnosis, expressing the desire to overcome this obstacle.

Throughout the hospitalization the patient benefited from psychological counseling and support after diagnosis disclosure. This added the psychologist to his support network, alongside the infectious diseases doctor. Counseling sessions consisted in semi-structured interviews about the patient’s personal and medical history, as well as free discussions regarding topics of interest for him – family, work-place, intimate relationships, social stigma. The main objective of was to explore fears and emotions linked to the HIV diagnosis, assisting the patient in dealing with them in a healthy and productive manner. The result of counseling and support were seen in a good compliance and adherence to antiretroviral (ARV) therapy, while resuming his daily routines and activities.

Three months after the first episode, the respiratory failure was resolved. The CD4
The patient-doctor-psychologist triangle in a case of severe immunosuppression in the HIV infection

cell count increased to 92 cells/mmc (fig. 1), and the viral load decreased over 100 times, VL 5530 copies/ml (fig. 2). Cotrimoxazole prophylaxis was maintained, reducing the dose to 2 tablets every 2 days, with continued ARV treatment and specific cancer therapy.

In May 2014 the viral load remained high viral and CD4 increased slightly.

However, in October 2014 VL grew to 12,800 copies/ml (fig. 2) and CD4 cell count dropped to 65 cells/mmc (fig. 1). The patient admitted that, after a period of good general condition, and after discontinuing therapy with enfuvirtide, he began to neglect antiretroviral therapy up to 3-4 days a week.

Daily psychological sessions were resumed, as well as repeated discussions with the infectious diseases doctor. These aimed to explore the patient’s reasons for non-adherence and help him identify ways to prevent this in the future. The main objective was to increase long term adherence and compliance to ARV therapy. On discharge the patient seemed willing to maintain his adherence to therapy.

In the month of May 2015, biological evaluations showed a CD4 count of 205 cells/mmc (fig. 1), and VL a little over the detection limit - 58 copies/ml (fig. 1), with a weight gain of 8 kg. The oncology therapy with interferon solved the Kaposi lesion on the upper left eyelid and faded the other elements on the skin. The prophylaxis for pneumocystis with Cotrimoxazole was suppressed because CD4 cell count rose above 200 cells /mmc.

On the 29th of October 2015 the patient
had 78 kg, with a plus of 25 kg compared to the time of his first presentation. The Kaposi sarcoma faded, his viral load was undetectable, and CD4 was 258 copies / mmc.

DISCUSSIONS

The case presented is that of an intellectual patient with very severe immunosuppression caused by HIV infection. He had the chance to overcome a complex, extremely aggressive and life-threatening pathology, with acute respiratory failure and disseminated Kaposi sarcoma.

Initially, his results were good, due to the possibility of a smooth communication and understanding of diagnosis and both therapy benefits and risks of non-adherence.

The patient received psychological support throughout the hospitalization. Counseling sessions focused on internalizing information regarding the diagnosis, and especially on building a positive self-image, strengthening self-respect and shaping positive future projections.

The therapy was based on the very probable etiology of respiratory failure – that of pneumocystosis, as well as on the Kaposi’s sarcoma. This specific therapy, alongside antiretroviral therapy, encouraged an increase of the immune competence over time, successfully managing the case (4,5).

However, therapeutic indications were apparently not enough. The patient’s high coefficient of intelligence and education were a baseline in establishing a productive patient-doctor relationship, but were not sufficient in providing long-term support for adherence. Daily clinical practice in the HIV/AIDS Regional Center in Iasi proved that, in a chronic disease such as HIV/AIDS, with lifelong daily therapy, psychological sessions are essential in offering support and helping patients find resources to cope (6,7,8).

CONCLUSIONS

Given the complexity of hospitalized cases, the management of an HIV-positive patient should be a team effort. In our study, we highlighted the fact that trust in the infectious diseases doctor, as well as confidence in one’s strength to overcome the burden of the diagnosis are as important as ARV therapy or treating opportunistic infections.

The psychologist’s intake is essential throughout the life of HIV infected patients; repeated counseling sessions are important for optimal adherence and compliance to therapy, in order to achieve viro-immunologic success and social integration. The need to adapt daily life and routines to new diagnosis requires its total acceptance; the support that people diagnosed with HIV receive facilitates this process of adaptation.

Therefore the development of a psychosocial department with trained professionals in the pathology of HIV/AIDS is more than necessary in managing the success of any case of HIV infection. The triangle formed by the doctor, the patient and the psychologist, working as a team toward a common goal, is the key to a successful management of the disease and should be a model included in every center that treats HIV pathology.

REFERENCES

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**ASPIRIN USE AND COLORECTAL CANCER**

Colorectal cancer (CRC) is the second most frequent type of cancer in Europe, with higher incidence for men after 50 years of age. Aspirin has anticancer effects. The aspirin use reduced the colorectal adenomas risk and the distant metastasis for patients with CRC. A recent meta-analysis summarized the results of eleven studies and showed that aspirin therapy after CRC diagnosis improved survival particular among patients with positive prostaglandin endoperoxide synthase 2 (PTGS2) expression and mutated PIK3CA tumors. PTGS2 is an enzyme involved in prostaglandin synthesis which promote inflammation and cell proliferation. Phosphatidylinositol 3-kinase (PI3K) has an important role in carcinogenesis. Also, the meta-analysis highlighted no association between aspirin use before diagnosis and CRC mortality. Future research is needed in order to establish the optimal doses and duration of aspirin adjuvant therapy in CRC (Peiwei Li; Han Wu; Honghe Zhang; Yu Shi; Jinming Xu; Yao Ye; Dajing Xia; Jun Yang; Jianting Cai; Yihua Wu. Aspirin use after diagnosis but not pre-diagnosis improves established colorectal cancer survival. Gut 2015;64(9):1419-1425).