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THE IMPORTANCE OF HIV SCREENING IN A SEXUAL TRANSMITTED DISEASE (STD) OUTPATIENT DEPARTMENT

PEREIRA JUDITE*, GODINHO MÁRIO*, BARATA FEIO A.*

RESUMO

Já está bem estabelecida a importância do rastreamento para HIV nos pacientes acompanhados regularmente no departamento ambulatorial de DST. Os autores apresentam um estudo revelando uma alta proporção de positividade HIV em um consirável número de pacientes que eram portadores desconhecidos. Também são apresentados alguns casos clínicos interessantes.

Unitermos: *DST, HIV, Screening.*

ABSTRACT

It is well established the importance of the HIV screening in the group of patients regulary observed in a STD outpatient department. The authors present a study that reveals a high proportion of positive HIV screening in a considerable number of patients previously unknown HIV carriers. Some interesting clinical cases are also reported.

Keywords: STD, HIV, Screening.

INTRODUCTION

We observed in our STD outpatient department, several patients who presented at time of the first observation, a variety of pathologies with arose the suspicion of immunosupression. The HIV laboratory screening performed with the knowledge and the agreement of all patients, revealed a considerable number of previously unknown HIV carriers.

We report some clinical cases that appeared interesting to us, because the patients also presented cutaneous manifestations considered criteria for AIDS.

* *Desterro Hospital, Lisboa - Portugal*

MATERIAL AND METHODS

We considered all the clinical processes recorded from January 91 to February 96. In this period we have observed 723 persons in our STD outpatient department. The number of patients that were seropositive for human immunodeficiency virus was 61 (8.43%). From these, 14 knew at the time of the first observation that they were HIV carriers, and the remaining 47 patients were detected to be HIV positive after the laboratory screening.

Concerning the sex and the age distribution, we observed 56 males (range 17-60 years, average 33,4 years) and 5 females (range 19-48 years, average 29.4 years). From these, 31 (50.81%) were white and 21 (34,42%) were black. In 9 (14,75%) clinical processes the race was not reported. Regarding the sexual behaviour, 20 patients (32,78%) were heterosexual, 6 (9,83%)were homosexual, and 4 (6,55%) were bisexual. Eleven patients (18,03%) were drug users, 9 (14,75%) had for sexual partener a drug user, 21 (34,42%) had sexual intercourse with prostitutes, and one of them (1,63%) had hemophilia.

The reason for the first observation in our STD outpatient department was multiple as: condylomata acuminata (observed in 23 patients), molluscum contagiosum (2), genital herpes (2), primary syphilis (1), secondary syphilis (4), chancroid (7), mixed chancroid (2), gonococcal urethritis (4), nonspecific urethritis (2), candidal balanitis (1), bipolar ulceration (1), Kaposi's haemorrhagic sarcoma (1), folliculitis (1) and fixed drug eruption of the glans penis (1). Some of the patients had more than one pathology, namely, condylomata acuminata, molluscum contagiosum and mixed chancroid (observed in 1 patient), condylomata acuminata and Kaposi's haemorrhagic sarcoma (1), condylomata acuminata and difuse tinea corporis (1), mixed chancroid, candidal balanitis and hairy cell leukoplakia (1), genital herpes, mixed chancroid and gonococcal urethritis (1), cervicitis and chancroid (1).

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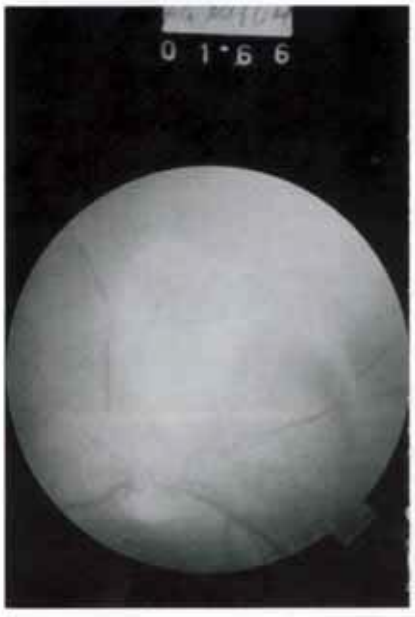
and another one had disseminated herpes virus infection with ulcerative colitis. The diagnosis of pulmonary tuberculosis was made in three patients, one patient presented the clinical picture of flexural psoriasis and another one developed a Reiter's syndrome.

Figure 1

Circinate balanitis and disseminated crusted papules and plaques.

Figure 2



Focal necrotizing chorioretinitis.

After the HIV laboratory screening we detected 9 patients (14,75%) seropositive for HIV 1 and 2, 51 patients (83,60%) seropositive only for HIV 1 and one patient (1,63%) seropositive for HIV 2. Regarding the serology for B and C hepatitis we observed 9 patients (14,75%) with HBsAg-positive and 40 patients (22,95%) with HBe antibody positive. Two patients (3,27%) presented the HBsAg and the HCV (by RIBA). Four patients (6,55%) were seropositive for HCV (by RIBA). Seven patients (11,47%) presented positive serology for syphilis. The VDRL range from 16 to 512 dils.

The patients who already knew to be HIV-infected, had a CD4 cell count average of 495,26 cells/mm^3 (range 86,6 to 1029 cells/mm^3). The ones who were detected to be HIV positive, for the first time in our STD outpatient department, presented a CD4 cell count average of 340,0 cells/mm^3 (range 6 to 688 cells/mm^3).

Following, the authors describe some interesting clinical cases.

The first one reports a heterosexual, 31-years-old, black male. The patient, born in Guiné-Bissau, presented in December 1991 a gonococcal urethritis. One month later, he was admitted in our hospital with a clinical and histological criteria for Reiter's syndrome. He also presented ophthalmic toxoplasmosis, stool analysis positive for giardia lamblia, condylomata acuminata of the glans penis and AIDS. The cranioencephalic CT scan was normal (Figures 1 and 2).

The laboratory studies revealed positivity for HIV, HBsAg, HBe antibody and HBC. The CD4 cell count reduced from 137 cells/mm^3 to 47 cells/mm^3 in 1996.

The therapy prescribed was: etretinate 70mg/d and later acitretine 50mg/d, zidovudine 1000mg/d, pyrimethamine 50mg/d, sulfadiazine 4g/d, prednisone 30mg/d, metronidazole 1000mg/d and podophyllin resin 25% associated with cryotherapy with liquid nitrogen repeated weekly or twice-a-week, with a good answer of the skin and ophthalmic lesions. He died in June 97 with cerebral cryptococcosis.

Figure 3

Discrete papules of the legs, after 3 weeks treatment with itraconazole.

The number of patients that were seropositive for human immunodeficiency virus was 61.

The next three cases have a common diagnosis of eosinophilic folliculitis. The first one regards a 32-years-old, heterosexual, black male. This man, born in Angola, presented in February 1996, highly pruriginous follicular papules on the face, trunk, arms and legs, with a one year evolution. He also had molluscum contagiosum of the penis. The laboratory studies revealed: leukocytes-4100 cells/mm^3; eosinophils-1775 cells/mm^3; CD4 T cells-14,3 cells/mm^3 and seropositivity for HIV 1. It was made the diagnosis of eosinophilic folliculitis, molluscum contagiosum and AIDS. The therapy prescribed was itraconazole 200mg/d for 5 weeks, zidovudine 500mg/d, trimethoprim-sulfamethoxazole 160-800mg/d and podophyllin resin 25% associated with cryotherapy with liquid nitrogen repeated twice-weekly for molluscum contagiosum. The patient had a symptomatic and clinical improvement after 3 weeks of treatment (Figure 3).

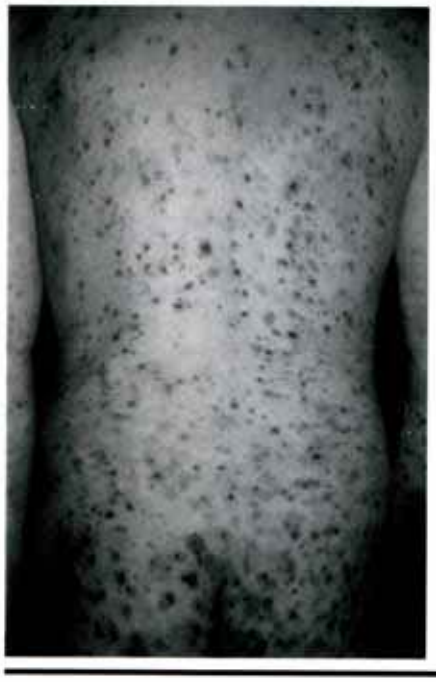
The second diagnosis of eosinophilic folliculitis was made in a 48-years-old, heterosexual, white male who had a personal history of intercourse with prostitutes. In September 1995 he detected a pruriginous cutaneous eruption that did notimprove for two years. The dermatosis had been treated as secondary syphilis, with benzatine penicillin. The patient presented to us with multiple erythematous follicular papolis of the entire cutaneous surface, sparing the palms, soles and penis, most of them, excoriated (Figure 4). He also had an exuberant facial seborrheic dermatitis. The laboratory studies revealed: leukocytes-4400 cells/mm^3; eosinophils-440 cells/mm3; CD4 T cells-37 cells/mm^3 and seropositivity for HIV 1. Beside the diagnosis of eosinophilic folliculitis, it was made the diagnosis of seborrheic dermatitis and AIDS. The patient was treated with UVB phototerapy with the Philips TL01 chamber (30 sessions on a daily basis), doxepin 50mg/d, zidovudine 500mg/d, trimethoprim-sulfamethoxazole 160-800mg/d and hidrocortisone cream for the face. He had a marked improvement of the clinical picture after 2 weeks of treatment.

The third case of eosinophilic folliculitis affected was a 30-years-old, heterosexual, black male, with a personal history of intercourse with prostitutes some of them endovenous drug users. He had since June 1996 highly pruriginous papular lesions on the face, trunk, arms and legs. We also observed condylomata acuminata of the penis and in the perianal area. The laboratory studies revealed: leukocytes-8.700 cells/mm^3; eosinophils-174 cells/mm^3; CD4 T cells-34 cells/mm^3 and seropositivity for HIV 1. It was proposed the diagnosis of eosinophilic folliculitis, condylomata acuminata and AIDS. The therapy prescribed was itraconazole 200mg/d, podophyllin resin 25% associated with cryotherapy, with liquid nitrogen repeated twice-weekly.

The follow-up was not possible because the patient was sent to another department.

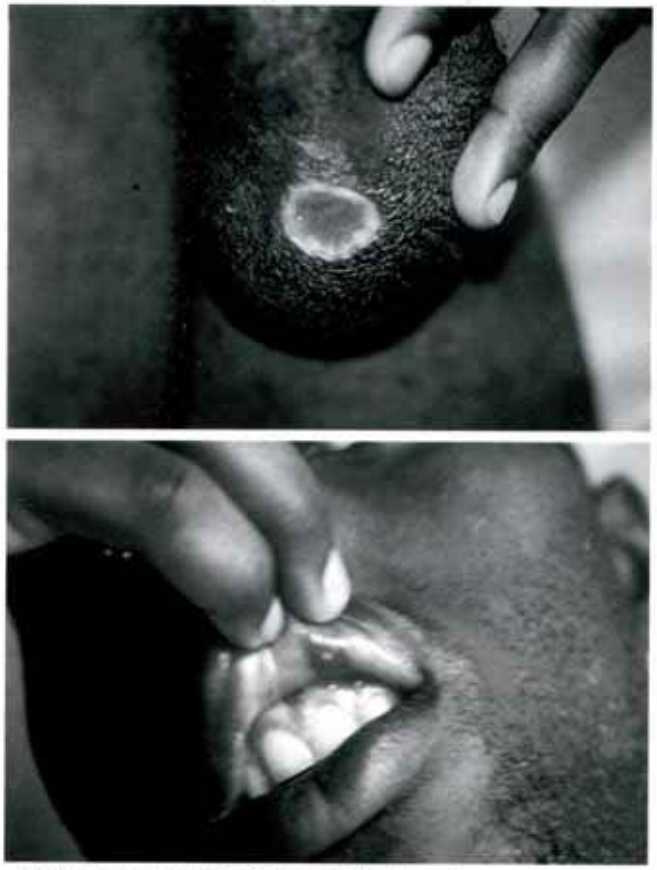
All the three cases of eosinophilic folliculitis revealed the histologic features of spongiosis and exoccytosis of eosinophils, the presence of intersticial eosinophils in

Figure 4



Excoriated papules of the trunk.

Figure 5 e 6



Painful ulceration of labial mucosal and scrotum.

The identification of some cutaneous lesions is in certain patients a starting point for the investigation of HIV seropositivity.

the dermis and follicular spongiosis with numerous eosinophils.

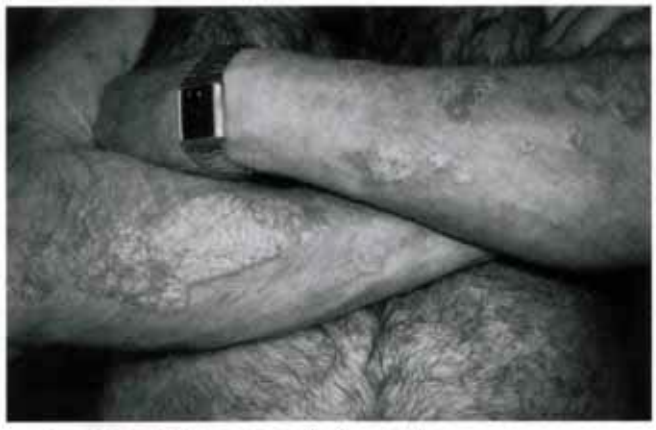
Following, we report a case of a bipolar ulceration. In March 1994, a 27-years-old, heterosexual, black male, was admitted in our hospital with secrotum and oral mucous membrane aphtosis (Figures 5 e 6). The patient, born in Guiné-Bissau, also refered generalized arthralgia. Previously, he had been polimedicated with antibiotics and topic drugs, without resolution of the lesions. The laboratory studies revealed: leukocytes-7.800 cells/mm^3; eosinophils-858 cells/mm^3; total proteins-9,1g/dl, gammaglobulin-37,8%; CD4 T cells-617 cells/mm^3; HIV 1 and 2 positive (western blot) and Mantoux (+ + +). The chest x-Ray revealed a right pleural effusion. The diagnosis proposed was bipolar ulceration and tuberculosis. He was transfered to another department and we couldn't follow-up the patient.

Figure 7

Multiple umbilicated papules of the face and neck.

The last case concernes a 35-years-old, heterosexual, white male, with a personal history of sexual intercourse with prostitutes. In February 1996 he detected multiple umbilicated papules on the face, trunk and penis (Figure 7). He also had a dirty painfull ulceration of the glans penis, condylomata acuminata of the penis and psoriasis vulgaris lesions on the trunk, arms and legs (Figure 8). On the tongue he presented hairy leukoplakia. It was detected in March 1996 a cerebral toxoplasmosis. The laboratory studies revealed: leukocytes-6.100 cells/mm^3; CD4 T cells-70 cells/mm^3 and seropositivity for HIV 1. It was established the diagnosis of molluscum contagiosum (with histologic confirmation), condylomata acuminata, chancroid, hairy leukoplakia, psoriasis vulgaris, cerebral toxoplasmosis and AIDS. The therapy prescribed was acitretine 50mg/d, sulfadiazine 4g/d, pyrimethamine 75mg/d, ceftriaxone 250mg/I.M., fluconazol 400mg/d, zidovudine 500mg/d, trimethoprim-sulfamethoxazole 160-800mg/d and cryosurgery with liquid nitrogen.

Figure 8



Disseminated lesions of psoriasis vulgaris.

DISCUSSION

The identification of some cutaneous lesions is in certain patients a starting point for the investigation of HIV seropositivity.

The development of these lesions is associated with the immunodeficiency status of the patient and the extention of the çutaneous involvement is greater in severe immunodeficient patients. In some cases, the cutaneous lesions develops only after HIV infection and in other cases the cutaneous manifestations already exists and exacerbates after of infection[1,2,3].

This study gave us the opportunity to analyse the influence of the sexual behavior and of some risk factors in the transmission of both types of HIV infection. We could confirm that in a sexual active population, there is a higher incidence of HIV seropositivity in males with a range age between 17 and 60 years (average age of 33.4 years). In females, the range age was between 19 and 48 years.

The sexual intercourse with prostitutes and with endovenous drug users parteners was associated with a higher risk of infection. These results were also reported in some others studies[1,2,3].

The number of patients with HIV 1 seropositivity was highly superior to those with HIV 2 or HIV 1 and HIV 2 infection.

The CD4 cell count was lower in the group of patients who did not know their HIV seropositivity. This is understandable because these patients, without antiviral therapy, do not have a immunologic balance.

Among several reasons for the first observation in our STD outpatient department we point out those of viral

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etiology, namely 23 cases of condylomata acuminata, and those of bacterial etiology, namely 7 cases of chancroid. This higher incidence of HPV infection in HIV seropositive patients was also detected by Komal *et al.*[4]. In their study, these authors also state that there is a faster progression of the HPV infection in patients with a CD4 cell count under 200/mm^3.

All the six cases that we report fulfill the criteria for AIDS as well the criteria for the associated pathologies, namely Reither's syndrome[5,6] and eosinophilic folliculitis[7,8,9].

The interest of the Reiter's syndrome case was due to the coexistence of a strictly ocular toxoplasmosis, without the typical cranioencephalic involvement observed in patients with AIDS. The observation of ophthalmologic involvement and high titers of anti-toxoplasma gondii antibodies permited to establish the diagnosis of ocular toxoplasmosis without neurologic lesions. This is a rare extremely localization of this infection (1-3%) since in these patients, the involvement of the Central Nervous System is frequent[10].

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