Syphilis, HIV and other Infections: A Continuing Challenge

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Abstract: Syphilis, HIV and other infections should be considered in patients with dermatology clinic lesions. We report the case of a young female who showed multiple lesions arond genital and perigenital areas. The dark field microscopy and serological study for syphilis and HIV were positive. Four months later she showed ulcerations which evidenced a partial response to penicillin treatment. The histopathology of skin biopsy reported "compatible with donovanosis" so she was treated with trimethoprim-sulfamethoxazole. Several months later, biopsy and scrapings of new lesions were performed and *Histoplasma capsulatum* was detected. Itraconazole therapy was initiated and after three years she returned with almost complete remission of the lesions.

Keywords: Syphilis, HIV, sexually transmitted disease, histoplasmosis, donovanosis.

INTRODUCTION

The interaction between syphilis and HIV infection is complex and remains incompletely understood. Although the effect of HIV infection on the natural history of syphilis has been known for a long time, it was not until recently that several studies documented that syphilis may also impact the course of HIV infection. New data have emerged increasing our understanding of the interaction between HIV infection and syphilis that apply to both the heterosexual population and other high risk groups [1, 2].

Despite reports of unusual clinical presentations and therapeutic responses among HIV-infected patients with syphilis, syphilis has not been regarded as a serious opportunistic infection that predictably progresses among most HIV-coinfected patients.

HIV infection had a small effect on the clinical manifestations of primary and secondary syphilis. Compared with HIV-uninfected patients, HIV-infected patients with primary syphilis tended to present more frequently with multiple ulcers, and HIV-infected patients with secondary syphilis presented with concomitant genitals ulcers more frequently [3].

Here, we present a case of a HIV infected female with multiple sexual partners who had clinical skin lesions associated with syphilis, histoplasmosis and donovanosis [4, 5].

CASE REPORT

A 25 years old female who attended our hospital showing multiple lesions around genital and perigenital areas that had started two months before.

Physical exam showed several vegetative lesions with reddish surface exuding a colorless and viscous fluid, compromising the labia, groin, inner thighs and anus (Figures **1**, **2**).

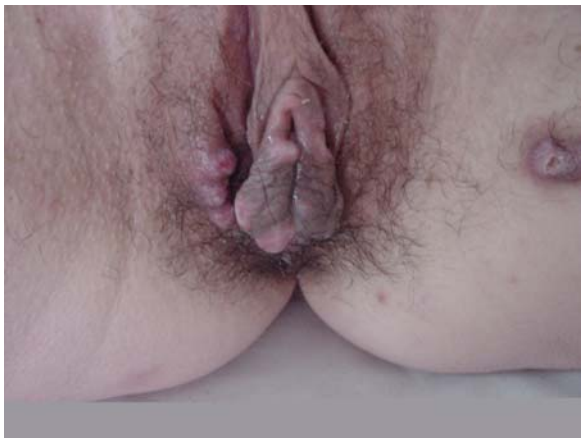

Figure 1: Vegetative lesions in vagin.

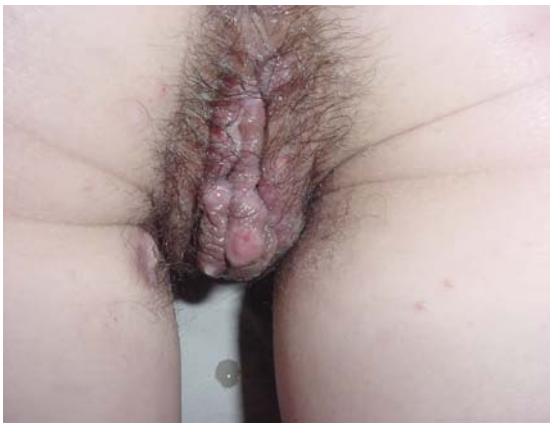

Figure 2: Vegetative lesions in anus.

The lesions were painful and sometimes pruritic. The patient also presented heavy vaginal discharge. She referred weight loss and menstrual cycle alterations.

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E-ISSN: 2310-998X/14

A few months ago she had had a non-espontaneous abortion.

She worked as a cooker in a private restaurant and lived with her grandmother but didn't have a fixed residence. She shared male partners with her friends.

Microbiological studies revealed vaginitis caused by *Trichomonas vaginalis* and the dark field microscopic analysis of the lesions was positive for *Treponema pallidum*.

Serological studies were also positive for syphilis (VDRL=2 dils) and HIV (ELISA and Western Blot).

Penicillin, metronidazole and antiretroviral drugs were indicated according to her immune status.

Four months later she returned showing ulcerations in several of the previous lesions which evidenced a partial response to penicillin treatment (Figures **3** to **5**).

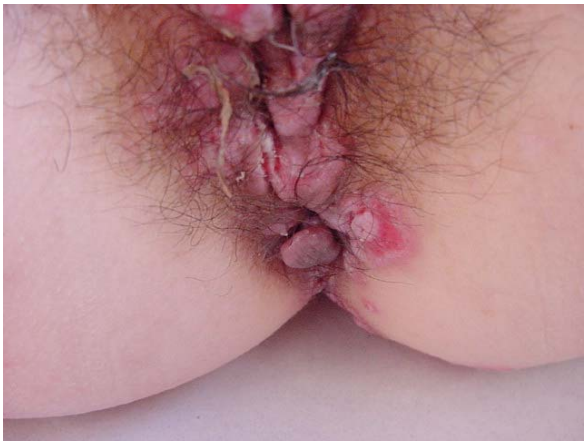

Figure 3: Ulcerations in vagina – anus.

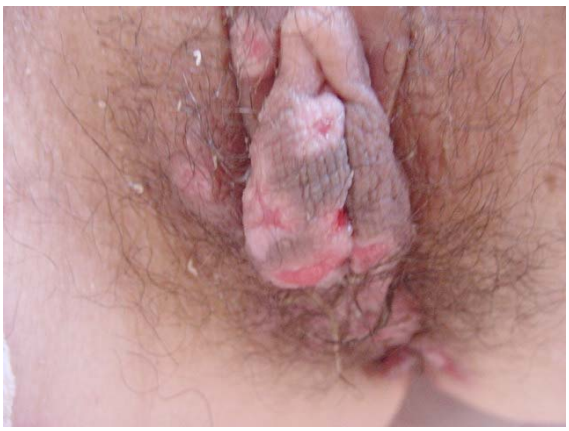

Figure 4: Ulcerations in vagina.

Skin biopsy was performed for research of *Klebsiella granulomatis* and the investigation of *Treponema pallidum* was repeated, being positive once again (Figure **6**).

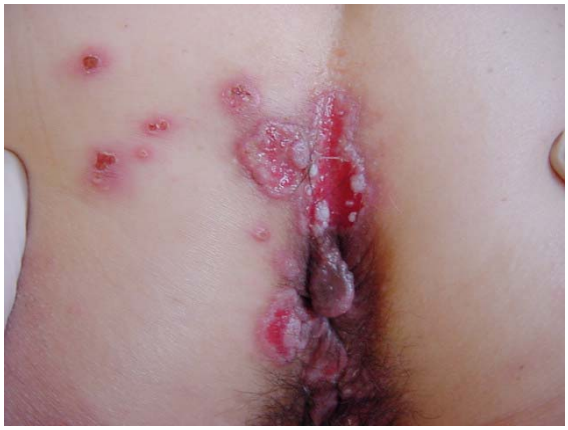

Figure 5: Ulcerations in anus.

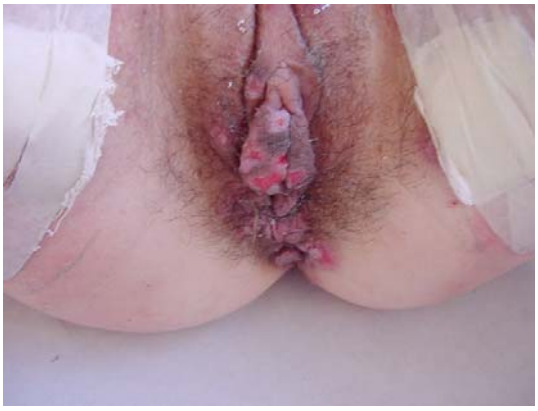

Figure 6: Lesions “compatible with donovanosis” in vagina and secondary syphilis (condylomas).

Giemsa stain revealed no donovan bodies but the pathology report informed: "compatible with donovanosis". Given this result she was treated with trimethoprim / sulfamethoxazole and partially improved (Figure **7**).

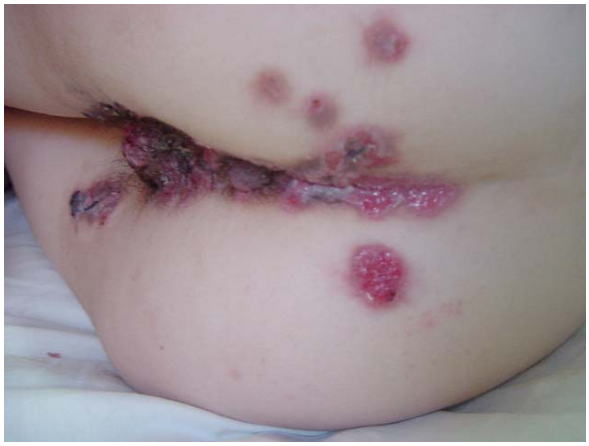

Figure 7: Lesions “compatible with donovanosis” in anus and syphilis condylomas.

The patient did not follow the indications given by the physician and did not return for following check outs. Several months later she was admitted to the Medical Clinic room with a severe respiratory distress. She had discontinued the antiretroviral treatment and the sulfonamides therapy, which had produced an allergic ocular reaction.

Biopsy and scrapings of new lesions were performed again. *Histoplasma capsulatum* was detected and V.O itraconazole was indicated (Figures **8**, **9**).

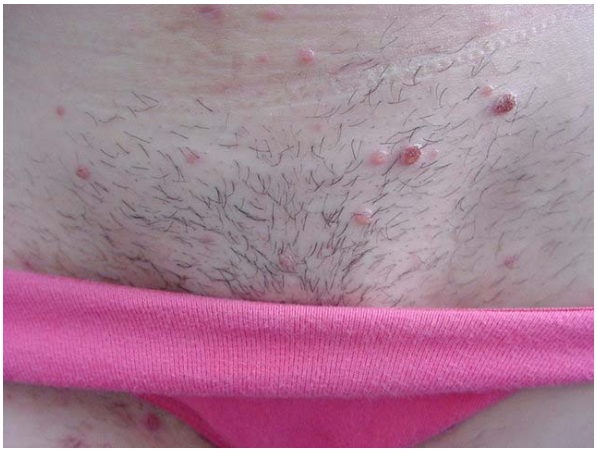

Figure 8: *Histoplasma capsulatum* lesions in suprapubic region.

After three years of the first hospital visit she returned with almost complete remission of the lesions.

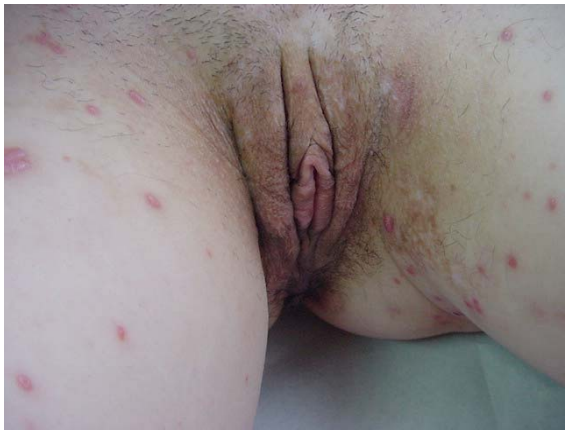

Figure 9: *Histoplasma capsulatum* lesions inner part of the legs.

CONCLUSIONS

We emphasize the need to apply special stains, dark field microscopy, mucocutaneous biopsia examination and serological tests in order to diagnose any genital lesion in young HIV-patients.

ACKNOWLEDGEMENTS

To Dr. María Elena Nardín by the contribution of her knowledge about micology.

REFERENCES

[1] Zetola NM, Klausner JD. Syphilis and HIV infection: an update. Clin Infect Dis 2007; 44: 1222-8. http://dx.doi.org/10.1086/513427

[2] Peterman TA, Heffelfinger JD, Swint EB, Groseclose SL. The changing epidemiology of syphilis. Sex Transm Dis 2005; 32: S4-10. http://dx.doi.org/10.1097/01.olq.0000180455.79024.e9

[3] Rompalo AM, Joesoef MR, O'Donnell JA, *et al*. Syphilis and HIV Study Group. Clinical manifestations of early syphilis by HIV status and gender: results of the syphilis and HIV study. Sex Transm Dis 2001; 28: 158-65. http://dx.doi.org/10.1097/00007435-200103000-00007

[4] Corti M, Villafañe MF, Palmieri O, Negroni R. Rupioid histoplasmosis: first case reported in an AIDS patient in Argentina. Rev Inst Med Trop Sao Paulo 2010; 52: 279-80. http://dx.doi.org/10.1590/S0036-46652010000400013

[5] Karp G, Schlaeffer F, Jotkowitz A, Riesenberg K. Syphilis and HIV co-infection. Eur J Intern Med 2009; 20: 9-13. http://dx.doi.org/10.1016/j.ejim.2008.04.002

Received on 18-12-2013 Accepted on 19-02-2014 Published on 05-03-2014

DOI: http://dx.doi.org/10.12970/2310-998X.2014.02.01.1