Scientific Research Publishing

Open Journal of Obstetrics and Gynecology, 2023, 13, 82-87
https://www.scirp.org/journal/ojog
ISSN Online: 2160-8806
ISSN Print: 2160-8792

Chronic Anogenital Ulcerations and Polymicrobial Pelvic Infections: About a Case

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How to cite this paper: Mendoua, M.F., Nkoro, G.A., Nguizaye, L., Akam, V.N. and Um, E.N. (2023) Chronic Anogenital Ulcerations and Polymicrobial Pelvic Infections: About a Case. *Open Journal of Obstetrics and Gynecology*, **13**, 82-87.
https://doi.org/10.4236/ojog.2023.131009

Received: December 19, 2022
Accepted: January 27, 2023
Published: January 30, 2023

Abstract

Genital ulceration is the loss of integrity of the mucous membranes (or genital skin) leaving the dermis uncovered and almost always accompanied by satellite lymphadenopathies. Beyond a month of evolution, it is said to be chronic. Sexually transmitted diseases are infections due to microbial agents among which parasites, bacteria, viruses and fungi that can be associated with each other to varying degrees. Sexually transmitted infections must be mentioned before any genital ulceration. Hence the interest of the case that we report of chronic anogenital ulcerations complicating a polymicrobial pelvic infection in a patient immunocompromised to HIV. The physical examination reveals a hypogastric sensitivity to deep palpation, the presence of a superinfected anogenital ulceration exposing the deep dermis covered with purulent serosities interesting the labia minora, the posterior vaginal fork, the anal region, the clitoris and an extension of the lesions to the gluteal fold is observed. We found a satellite lymphadenopathy in the right inguinal fold. The screening finds the HIV1 positive serology with a viral load of 28,000 copies, the herpes simplex 1&2 and Chlamydia trachomatis serologies were all positive. The genital samples are marked by the presence of bacterial vaginosis with Candida Albicans and Gardnerella Vaginalis, the presence of urogenital mycoplasmas of the Ureaplasma Urealyticum The pelvic ultrasound was in favor of a bilateral adnexitis. A protocol was put in place: the first step consisted of seat baths, antifungi and antibiotics administration: fluconazole 150 mg and tinidazole 2 g in single doses, then josamycin 1 g/24h in two doses per os for two weeks. The second stage consists of the adminis-

tration of doxycycline 200 mg for 21 days, Aciclovir 500 mg for 10 days, and the administration of ARV (Tenofovir + Lamivudine + Dolutegravir) or one tablet daily. The evolution is marked by a progressive healing of the clitoris, the labia majora and labia minora, the posterior vaginal fork. In case of chronicity, a biopsy in search of a tumor process is not mandatory when there is a satisfactory response to treatment and good healing. The patient's death two weeks after the beginning of ARV treatment, can be explained by a probable immune reconstitution syndrome.

Keywords

Anogenital, Ulceration, Polymicrobial, Infection

1. Introduction

According to the French National College of Obstetric Gynecologists, chronic genital ulceration is defined as a loss of superficial substance more or less deep leaving at least the dermis uncovered (erosion) and sometimes interesting the medium or deep dermis (ulceration) [1]. They will be called chronic when their evolution is greater than a month. Genital ulcerations are characterized by vesicular, erosive lesions of the genital organs, single or multiple accompanied or not by regional lymphadenopathies [2]. Before any genital ulceration, a sexually transmitted infection must be mentioned. Sexually transmitted diseases are infections due to microbial agents among which parasites, bacteria, viruses and fungi that can be associated with each other to varying degrees. The severity of STDs is linked to: the virulence of certain causative agents, the long incubation period, the contagious potential, the frequent ignorance of the infection evolving at low noise [3].

2. Case Presentation

We receive in gynaecological consultation, a 26-year-old patient G1P1001, presenting a menstrual cycle without abnormalities, with a history of unprotected vaginal sex with a 44-year-old partner of whom she was unaware of the positive character of the HIV serological status before the consultation. She describes the appearance of abundant, malodorous, and itchy leucorrhoea, associated with intermittent low pelvic pain of mild to moderate intensity without digestive signs, nor urinary evolving, nor fever for two months. What motivates douching with soapy water. It follows a week later, an eruption of vesicles in the clitoris, labia majora, painless, and spontaneously rupturing leaving a smelly liquid. Faced with this discomfort, the patient applied an ointment based on bacitracin 250 UI/g + neomycin 5000 UI/g, several days. She observes an extension of the vesicles to the gluteal fold and the entrance to the vagina. These confluence and turn into painful oozing sores preventing him from wearing underwear and sitting down, what motivates the consultation.

The physical examination reveals a hypogastric sensitivity to deep palpation, the presence of a superinfected anogenital ulceration exposing the deep dermis covered with purulent serosities interesting the labia minora, the posterior vaginal fork, the perianal region (**Figure 1**), the clitoris (**Figure 2**) and an extension of the lesions to the gluteal fold is observed (**Figure 3**). We found a satellite lymphadenopathy in the right inguinal fold. The placement of the speculum was impossible because of the localization of the lesions and the painful nature. The vaginal touch reveals a sensitivity of the Douglas sacs, a pain at the mobilization of the cervix and malodorous yellowish leucorrhoea (rotten fish smell). The screening of sexually transmitted infections finds the HIV positive serologies with a viral load of 28,000 copies, the herpes simplex 1&2 and Chlamydia trachomatis serologies all positive. The genital samples are marked by the presence of bacterial vaginosis with Candida Albicans and Gardnerella Vaginalis, the presence of urogenital mycoplasmas of the Ureaplasma Urealyticum type sensitive to josamycin, sparfloxacin, gatifloxacin is noted. The pelvic ultrasound was in favor of a bilateral adnexitis with an effusion of low abundance in the Douglas cul-de-sacs.

In view of the above, our working diagnosis was chronic ano-genital ulcerations complicating a polymicrobial pelvic infection in a patient living with HIV by chance discovery. A protocol was put in place: the first step consisted of seat baths with gynecological betadine three times a day, then drying with a sterile compress until healing, administration of fluconazole 150 mg and tinidazole 2 g in single doses on the first day, then josamycin 1 g/24h in two doses per os for two weeks. The evolution is marked by the disappearance of malodorous leucorrhoea and pelvialgia, there has been a drying of the lesions in clear regression. The second stage consists of the administration of doxycycline 200 mg per os in a daily dose in the middle of a meal for 21 days, Aciclovir 500 mg or 1 tablet × 5 daily for 10 days, and the administration of ARV (Tenofovir + Lamivudine + Dolutegravir) or 1 tablet daily. The evolution is marked by progressive healing of the clitoris, the labia majora and labia minora, the posterior vaginal fork (**Figure 4**). Two weeks after being put on ARV, the patient dies.

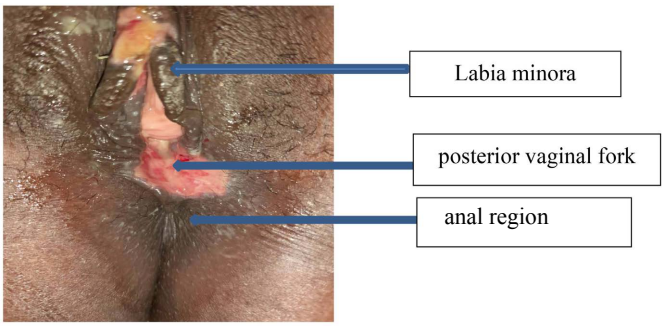

Figure 1. Superinfected ano-genital ulceration exposing the deep dermis covered with purulent serosities interesting the labia minora, the posterior vaginal fork, the anal margin.

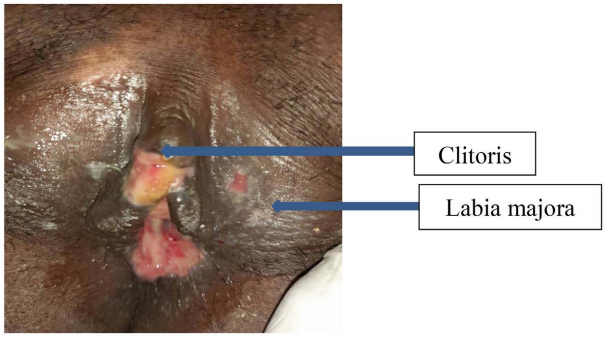

Figure 2. Ulceration of the clitoris and labia majora.

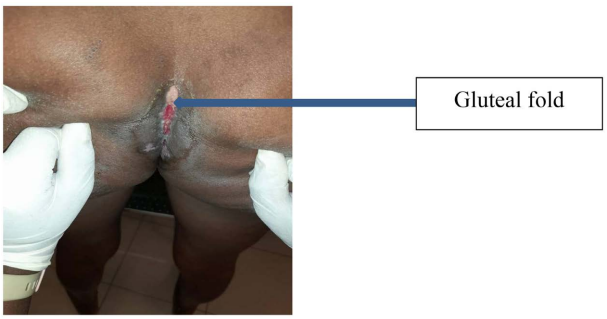

Figure 3. Extension of the ulceration on the gluteal fold.

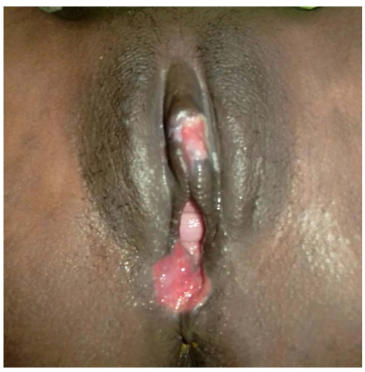

Figure 4. Clitoris, posterior vaginal fork, labia majora and minora in healing process.

3. Discussion

We presented a case of chronic ano-genital ulcerations complicating a polymicrobial pelvic infection in a patient living with HIV by chance discovery. In young sexually active people, they are most often associated with a sexually transmitted infection. Genital ulcerations are usually localized on the labia, in the vagina and the anal region.

Faced with the clinical picture presented by the patient, the serologies herpes simplex 1 and 2 and chlamydia trachomatis carried out were positive. Genital herpes is the most common cause of genital ulceration, 70% to 80% of genital ulcerations are attributable to the herpes simplex virus type 1 and/or 2 [4]. This

diagnosis is only obvious when there are vesicles, it is important not to ignore a primary HIV infection, a rarer cause of genital ulceration that is accompanied by fever, polyadenopathies, and a skin rash. As in our case, the absence of vesicles makes it difficult to diagnose herpes, syphilitic or primary HIV infection on clinical examination alone, as superinfection is frequent and the positive predictive value of clinical elements (pain, induration…) is low [5].

Chlamydia trachomatis is an obligate intracellular pathogen. There are three groups according to the type of lesions: serotypes A, B, Ba, C causing anogenital infections and serotypes L_1, L_2 and L_3 for lymphogranulomatosis venereum [6]. However, it is described that chlamydia trachomatis can also manifest itself by genital or anal ulcerations that often go unnoticed because they are painless, then inguinal inflammatory lymphadenopathies appear which can fistulize or lead to acute anorectitis [7].

Moreover, the symptoms of lymphogranulomatosis venereum are divided into three classical stages: the primary stage marked by a localized inflammation without the patient's knowledge, at the site of exposure, often genital, rectal or oropharyngeal. The classic lesion is transient papule, but may develop into a pustule or ulcer. The secondary stage is manifested by the appearance of primary lesion followed by regional tissue invasion which may be accompanied by fever, chills, myalgia, and arthralgia. In case of vulvar inoculation, the main sign is a unilateral, painful and firm lymphadenopathy in the inguinal or femoral region called a bubo which may suppress and then fustilise. The tertiary stage can lead to irreversible tissue destruction and scarring [8].

According to Dehen, there is a good response to Aciclovir-based treatment for chronic herpetic vulvar ulceration [9], which heals 80% as is the case with our patient. For Chlamydia trachomatis infection, doxycycline is the recommended molecule and gives satisfactory results at a dose of 100mg twice daily by mouth for 21days [10]. Several studies have shown resistance to azythromycin

It should be noted that genital ulcerations can also be attributable to fungal infections, in particular candida albicans, giving way to vaginal ulcerations [11].

In front of a chronic genital ulceration, a biopsy is recommended, however in our case, in view of the satisfactory response to the treatment and a good healing the biopsy was not done. The rapid extension of the lesions in our patient can be explained by the HIV co-infection with a high viral load of 28,000 copies. The patient's death two weeks after the beginning of ARV treatment, can be explained by a probable immune reconstitution syndrome.

4. Conclusion

In view of all the above, more than one aetiology can be the cause of ano-genital ulcerations, sexually transmitted diseases are at the top of the list. HIV co-infection is an exceptional cause of ulceration, genital herpes is by far the most frequent cause. Chlamydia Trachomatis in most cases remains asymptomatic, but can manifest itself as anal ulcerations. The polymicrobial character shows that there may be an interaction between the different STDs. In case of chronicity, a biopsy

in search of a tumour process is not mandatory when there is a satisfactory response to treatment and good healing.

Authors' Contributions

All authors contributed to the writing of this work. The authors declare to have read and approved the final version of this work.

Michèle Florence Mendoua and Grâce Anita Nkoro: writing + literature review lucie Nguizaye and Vanina Ngono Akam: proofreading.

Esther Ngo Um: supervision.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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