

Genital Ulcers and Multidrug Resistance

Akani CI^{1*}, John CO¹, Abbey M²

¹Department of Obstetrics and Gynecology, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

²Department of Obstetrics and Gynaecology, Rivers State University Teaching Hospital Port Harcourt, Rivers State, Nigeria

DOI: 10.36348/sijog.2022.v05i03.007

| Received: 17.02.2022 | Accepted: 23.03.2022 | Published: 30.03.2022

*Corresponding author: Akani CI

Department of Obstetrics and Gynecology, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

Abstract

Chancroid is a sexually transmitted disease (STD) caused by the Gram-negative bacterium *Haemophilus ducreyi* and is characterised by necrotising genito-perineal ulcers which may be accompanied by inguinal lymphadenitis or bubo formation with possible spread to the thigh. We presented a rare case of a 23year old polytechnic undergraduate who presented to the hospital with complaints of extensive painful ulcer in her vulva for over ten (10) days. On culture of the swab from the ulcer, *Haemophilus Ducreyi* and *E Coli* sensitive to Ceftriazone, Ofloxacin and Gentamycin were isolated. Patient was treated with IV Ceftriazone for 5 days and Ciprofloxacin for 10 days with good recovery. The case highlighted the need for increased vigilance in managing genital ulcers in contemporary clinical practices and for carefulness in the choice of a sexual partner and practices among adolescents and young girls.

Keywords: sexually transmitted disease (STD), Genital Ulcers, Multidrug Resistance.

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Genital Ulcerative lesions such as evident on the descriptive photographic features are rare in contemporary clinical practice. Overtime, they are gradually making re-emerging counts in immune compromised patients. This rare case demonstrates how destructive chancroid infection can run when appropriate treatment is delayed or is hard to reach. The microbial isolates were susceptible to the applied antibiotics. Good genital hygiene, prevention of sexually transmitted diseases remain complimentary adjuncts to possible eradication of this scourge.

Sometimes, diagnosis of this dreaded disease becomes extremely difficult as some other isolates of various bacteria are often cultured along side *haemophilus ducreyi*. Also, viral and even fungal organisms may be isolated in the same patient when appropriate multiple lines of investigation are employed, especially in the very highly sexually active women [2, 3]. Also, other forms of genital ulcers may also make the express diagnosis of chancroid confusing, hence warranting the use of multiple drug regimen that may not be even helpful in curing the chief organism [4].

Such Florid Ulcerative lesions become aggressive in the face of multidrug resistant gram negative bacteria in which circumstance the old antibiotics emerge as last resort [1].

Appropriate empirical therapy has been shown to be strongly associated with better clinical results[8].

CASE REPORT

Miss C. N. is a 23year old polytechnic undergraduate who presented to the University of Port Harcourt accident and emergency department from a rural hospital following complaints of extensive painful sore in her genital area for over ten (10) days. This had traumatized her physical health and caused her some psychological depression.

The sore followed an unprotected sexual intercourse with a partner who had a suspected penile wounds. She had low grade fever, punctuate rashes on the thighs and perineum.

She had various medications, oral and injectable antibiotics for over 12 days but the ulcer

continued to extend, with painful edges and copious purulent discharge. She had dysuria and discomfort while walking. She presented to the hospital when the medications failed to offer relief [7, 8].

On examination she had an infected genital ulcer with copious vaginal discharge and tender inguinal lymph nodes coupled with some postural lesions on the thighs and perineum. The ulcer edges were painful.



Fig-1: The Chancroid Ulcer on presentation



Fig-2: Improving on treatment

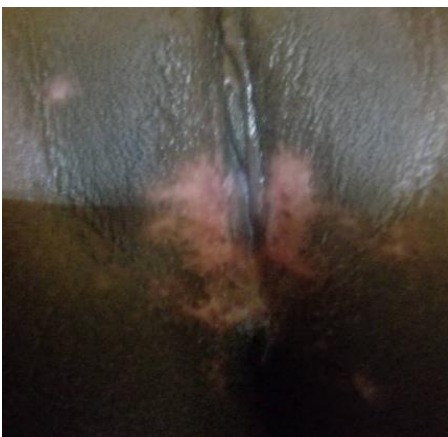


Fig-3: Well healed and discharged

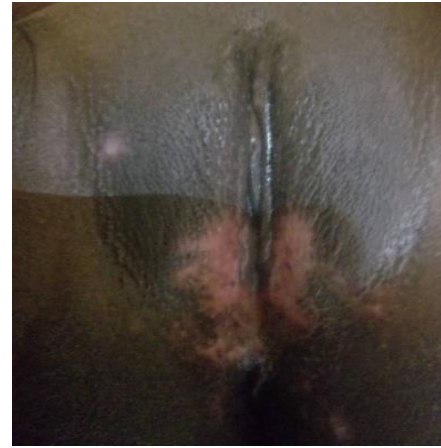


Fig-4: Good healing with Hypopigmented patches

She was admitted into the gynaecology ward, her vital signs were stable. She received intravenous ceftriaxone 2grams daily for 5 days and Tabs Ciprofloxacin 500mg 12 hourly for 10 days. She made remarkable response to therapy and genital toileting + sitz bath. Her full blood count was normal. The serology for Human Immunodeficiency virus 1 & 2 were negative. The serum electrolyte, urea, creatinine and uric acid were all within normal range. Her urine microscopy, culture and sensitivity yielded moderate growth of E-coli. A chocolate Agar culture of the swab from the ulcer yielded growth of *Haemophilus Ducreyi*. Good healing of the ulcer was achieved, and she was discharged on the 25th day following admission.

DISCUSSION

Chancroid is characterized by painful, necrotizing genital ulcer and lymphadenopathy. This disease is highly contagious, but curable. *Haemophilus ducreyi*, a fastidious gram negative coccobacillus, an opportunistic microorganism is the causative agent.

Miss CM had contact with an open penile sore in a sexual encounter, she also admitted to substance abuse, although she was HIV sero negative.

Culture of the ulcer is currently considered the gold standard or bench mark using chocolate Agar. The culture was done and it yielded *Haemophilus Ducreyi* sensitive to Ceftriazone. *Candida Albicans* and also *E coli* sensitive to Ceftriaxone, Ofloxacin and Gentamycin were also isolated. Chronic or untreated chancroid infections are more difficult to treat as in this case. Protracted treatment failure before seeking appropriate medical attention was noted in the patient [8].

This case highlights the need for social awareness, improved changes in sexual habit and practices among adolescents and young people[9]. Above all this calls for increased vigilance in managing genital ulcers in contemporary clinical practices.

REFERENCES

1. Zavascki, A. P., Goldani, L. Z., Li, J., & Nation, R. L. (2007). Polymyxin B for the treatment of multidrug-resistant pathogens: a critical review. *Journal of antimicrobial chemotherapy*, 60(6), 1206-1215.
2. Putri, R., Anggrainy, T., Widita, W., Yaumi, N. (2021). Chancroid coexisting with vaginal candiditis: A case report. Open access macedonian journal of medical sciences, 9(c):318-321
3. Ankita, D., Grubb, L.K. (2021). A chief complaint of blisters in an adolescent. Paediatric review, 42(6); 336-338
4. Bachaspatimayum, R., Zamzachin, G., Davi, T.B. (2021). Clinical and laboratory profile of genital ulcers (sexually transmitted diseases) in a tertiary care center in northeastern India, 12(2); 120-128
5. Kang, C. I., Kim, S. H., Park, W. B., Lee, K. D., Kim, H. B., Kim, E. C., ... & Choe, K. W. (2005). Bloodstream infections caused by antibiotic-resistant gram-negative bacilli: risk factors for mortality and impact of inappropriate initial antimicrobial therapy on outcome. *Antimicrobial agents and chemotherapy*, 49(2), 760-766.
6. Plummer, F. A., Simonsen, J. N., Cameron, D. W., Ndinya-Achola, J. O., Kreiss, J. K., Gakinya, M. N., ... & Ngugi, E. N. (1991). Cofactors in male-female sexual transmission of human immunodeficiency virus type 1. *Journal of infectious diseases*, 163(2), 233-239.
7. Kharsany, A., Mahabeer, Y., Connolly, C., & Sturm, A. W. (2000, July). Changing aetiology of genital ulcer disease (GUD) in STD clinic attenders with a rising HIV prevalence. In *13th International AIDS Conference. Durban*.
8. Van Dyck, E. D. D. Y., Bogaerts, J., Smet, H., Tello, W. M., Mukantabana, V., & Piot, P. (1994). Emergence of *Haemophilus ducreyi* resistance to trimethoprim-sulfamethoxazole in Rwanda. *Antimicrobial agents and chemotherapy*, 38(7), 1647-1648.
9. Steen, R. (2001). Sex, Soap and antibiotics; the case for chancroid eradication. *Int. J STD. AIDS*, 12(suppl 2);21;147