

CASE REPORT

 OPEN ACCESS

Received: 27.10.2022

Accepted: 22.12.2022

Published: 21.05.2022

Citation: Rajashekar TS, Suresh Kumar K, Vaishnavi BV, Anjana G, Shiva Saadhvi M, Harihara SM, Hanumanthayya K. Dermatology Photo Quiz 2. J Clin Biomed Sci 2023; 13(1): 22-24. <https://doi.org/10.58739/jcbs/v13i1.22.125>

* **Corresponding author.**

kelojihan123@sduaher.ac.in

Funding: None

Competing Interests: None

Copyright: This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published By Sri Devaraj Urs Academy of Higher Education, Kolar, Karnataka

ISSN

Print: 2231-4180

Electronic: 2319-2453



Dermatology Photo Quiz 2

Rajashekar T S¹, Suresh Kumar K², Vaishnavi B V³, Anjana G⁴, Shiva Saadhvi M⁴, Harihara Subramanian M⁴, Hanumanthayya K⁵*

1 Professor & HOD, Department of Dermatology, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, India

2 Associate Professor, Department of Dermatology, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, India

3 Senior Resident, Department of Dermatology, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, India

4 PG Students, Department of Dermatology, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, India

5 Professor, Department of Dermatology, Sri Devaraj Urs Medical College, Tamaka, Kolar, Karnataka, India

Abstract

40-year-old male, married, and sexually active gentleman, had un-protected sex with other woman, after 5 days, he noticed painful ulcers on his penis. He came to hospital, examination revealed, painful ulcers on glans penis and inner layer of prepuce, with regional lymph node enlargement. Routine and specific investigations were done. Treatment was given, after 10 days, ulcers healed. Genital hygiene and counselling were done, and asked the gentleman to come for regular check-up.

Keywords: STD; Chancroid; H ducreyi

Patient history and clinical examination

40-year-old male, educated, married, and sexually active gentleman came to our OPD on 28.09.2022 with the complaint of a painful ulcer on his penis since 3 days.

Investigations

All routine investigations are normal.

Blood VDRL, HIV 1 & 2, HSV 1 & 2 are normal.

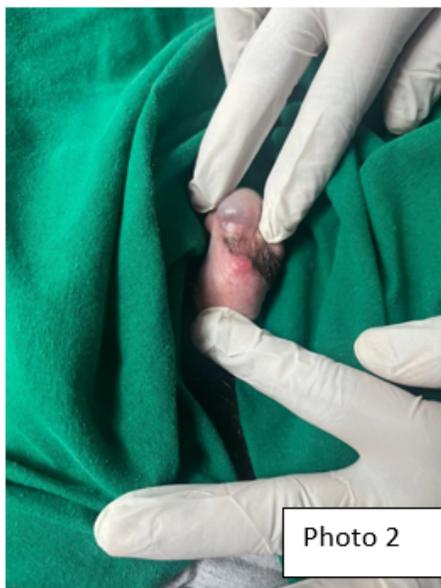
Photo 1 → O/E prepuce is retracted; ulcers are present on the edge of glans penis, inner surface of prepuce.

Ulcer on the glans penis (edge of coronal sulcus) is well-defined, superficial, shallow and tender ulcer; floor is covered with necrotic tissue, border is raised and with undermined edge, size is 3X3 mm.

Similar ulcer is present on inner surface of prepuce.

In between these 2 ulcers, few superficial, shallow painful ulcers are present.

Right inguinal lymph nodes are enlarged and tender.



1. Inj Ceftriaxone 250 mg, IM given.
2. Cap Doxycycline 100 mg, 1 capsule 2 times a day for 2 weeks given.

Photo 2 → On 10.10.2022, he has come for check-up, ulcers have healed, erythema, oedema, and tenderness has regressed, epithelization started.

What is your diagnosis?

Introduction

Sex is the basic instinct of living beings. Hunger, thirst, and sleep are also important basic instincts of life. Today,

the media like Television, Radio, Magazines and WhatsApp group give detailed information about Sexually Transmitted Diseases (STD) and complications, still people have multiple sexual partners. They know, monogamy and monoandry are good for healthy life, but the strong desire to have sex with multiple partners, and unprotected sex, will make them to suffer from STDs. This educated gentleman had unprotected sex with other woman, developed ulcer on the genitalia.

WHO in 2021 issued guidelines to treat all symptomatic STD. These guidelines simplify the treatment of the 1) Ulcers on the genitalia → Genital Ulcer Disease, 2) Discharge from urethra → Urethral Discharge Syndrome, 3) Discharge from vagina → Vaginal Discharge Syndrome, 4) Discharge from anus and rectum → Anorectal discharge syndrome, and 5) Pain in the lower abdomen → Pelvic Inflammatory Disease Syndrome.¹

STD ulcers develop on genitalia due to bacterial infections OR viral infections. The bacteria producing ulcers on genitalia are 1) *Treponema pallidum* (Syphilis), 2) *Haemophilus ducreyi* (Chancroid), 3) *Chlamydia trachomatis*, serovars L1, L2 and L3, (Lymphogranuloma venerium), and 4) *Klebsiella granulomatis* (*Calymmatobacterium granulomatis* → Granuloma venerium). Viral infections producing ulcers on genitalia are Herpes infection (Herpes genitalia).

Case report

40 year old married man, had unprotected sex with other woman. After 5 days, he noticed painful ulcers over genitalia. O/E multiple well defined, superficial, shallow ulcers present on glans penis and inner surface of prepuce. The floor is covered with slough. The base is soft to touch, and patient feels pain during palpation. The edge is raised and slopes inwards (under mined edge). Right inguinal lymph nodes are slightly enlarged, tender, not matted.

Investigations

All routine investigations are within normal limits. Special investigations done, VDRL is nonreactive; HIV 1& 2 are nonreactive, and HSV 1 & 2 are nonreactive.

Clinical diagnosis: Chancroid

Chancroid

Chancroid is one of the STD. it is caused by *Haemophilus ducreyi*.² *H. ducreyi* is extremely sensitive organism; die immediately outside the human body, hence very difficult to grow on culture medium in laboratory. The taxonomic position of *Haemophilus ducreyi* has changed from true haemophili (such as *Haemophilus influenza*) to the Actinobacillus cluster of the family Pasteurellaceae. *H. ducreyi* is gram negative coco-bacilli. Gram stain examination show,

the organism is arranged in chains of two or four organisms, sometimes in chains, giving the appearance of “School of fish” or “Rail road track”.²

The organism enters the host from infected person, through minor abrasions. The organism liberates cyto-lethal toxins, inflammatory infiltrate collect and a papule is formed. Soon the cyto-lethal toxins cause irreversible death of epithelial cells, and typical superficial shallow ulcer develops.³ *H. ducreyi* enters the lymphatic channels, and initiate unilateral lymphadenopathy. Soon the lymph nodes enlarge and then form unilocular abscess called “Inflammatory bubo”.³

The sites of infection in male are the external or the internal surface of prepuce, coronal sulcus, on either sides of frenulum, and glans penis. The men, who use condom, may develop ulcers around the root of the penis. The sites of infection in woman are on labia majora and minora, fourchette, vagina and perianal region. Rarely ulcers may develop on breasts, and face.

Morphology of ulcer differs in patients, depending on the immune status of the individual, coinfections. Hence there are eight clinical variants. 1) Giant chancroid, 2) Large serpiginous ulcer, 3) Phagedenic chancroid, 4) Transient chancroid, 5) Follicular chancroid, 6) Papular chancroid, 7) Dwarf chancroid, and 8) Pseudo granuloma inguinale,

Treatment

Patient was given counselling, informed about monogamy and monoandry, importance of condom use, and regular

checkup. Inj Ceftriaxone 250 mg given intramuscularly and Cap Doxycycline 100 mg capsule, 2 times a day for 15 days given.

Discussion

Most common cause of STD ulcer today is Herpes genitalis and Syphilitic ulcer. Genital herpes start with vesicles, soon rupture to form erosions (ulcers), and HSV 1 & 2 may be reactive. This patient has not noticed the vesicles, HSV 1 & 2 are not reactive, and responded to antibiotics. Hence Genital herpes is ruled out. Syphilitic ulcer is usually single ulcer, painless ulcer, indurated base and floor is clean. VDRL test may be reactive. This patient had painful, superficial, shallow ulcer with soft base, and VDRL test is negative. Hence the possibility of syphilitic ulcer is ruled out. The diagnosis of soft chancroid is made and treatment is given. Even though the prevalence of soft chancroid is less, still we have to remember it in every case of ulcers on genitalia.

References

- 1) Guidelines for the management of symptomatic sexually transmitted infections (Internet). Geneva: World Health Organization. 2021.
- 2) Alfa M. The laboratory diagnosis of *Haemophilus ducreyi*. *Can J Infect Dis Med Microbiol.* 2005;16(1):31–34. Available from: <https://doi.org/10.1155/2005/851610>.
- 3) Irizarry L, Velasquez J, and AAW. Chancroid. StatPearls Publishing. 2022. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK513331/>.