

# An AIDS Patient with Multiple Skin Crusted Ulcerations

Yu Wang

China Medical University First Hospital <https://orcid.org/0000-0002-6495-1425>

Ying Wen (✉ [Wenying666466@163.com](mailto:Wenying666466@163.com))

---

## Short Report

**Keywords:** Malignant syphilis, Acquired Immune Deficiency Syndrome, Ulceration

**Posted Date:** June 11th, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-34419/v1>

**License:**   This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

**Background:** We report a rare case of AIDS patient with crusted ulcerations.

**Case presentation:** A 22-year-old homosexual male was admitted to hospital for fever and ulcerations with overlying brown–black crusts. Then he was confirmed human immunodeficiency virus infection . Secondary syphilis was diagnosed by positive Markers and biopsy pathology. After application of benzathine penicillin for 3 weeks, the symptoms improved.

**Conclusions:** Malignant syphilis is a rare form of secondary syphilis, but tends to occur in AIDS patients because of low immune function. It is usually treated well after regular treatment.

## Case Presentation

A 22-year-old homosexual male presented with fever, maculopapules and blisters on his face, trunk, and extremities. When the blisters broke, the skin ulcerated and then scabbed with overlying brown–black rupioid crusts within 3 weeks. When he was admitted to hospital, there were Multiple Skin crusted Ulcerations on the trunk (Fig. 1a) and extremities (Fig. 1b). There was a small ulcer with yellow discharge in the perineum, swelling of bilateral Subaxillary lymph nodes.

The examinations showed White Blood Cell (WBC)  $11.98 \times 10^9/L$ , neutrophils  $9.82 \times 10^9/L$ , C-reactive protein (CRP) 152 mg/dL, serum immunoglobulins and Anti-neutrophil cytoplasmic antibodies (ANCA) were normal, cultures of fungi, bacteria were negative. He was confirmed Human Immunodeficiency Virus(HIV) infection and his CD4<sup>+</sup>T cell counts were 117/ $\mu$ L, HIVRNA  $4.22 \times 10^5$ copies/ml. The biopsy pathology of right forearm lesion (Fig. 1c) showed an ulcer, dense inflammatory cells infiltrated in the dermis, including neutrophil, lymphocytes and histocytes, there was deep perivascular infiltration of lymphocytes and plasma cells. Malignant secondary syphilis was diagnosed according to the biopsy pathology, positive serum syphilis enzyme immunoassay (EIA) screening and high serum rapid plasma regain (RPR) test titer (1:64). After application of benzathine penicillin for 3 weeks, the rashes were in complete remission (Fig. 1d). RPR titer decreased (1:4) 8 months later.

## Discussion And Conclusions

Malignant syphilis is an uncommon form of destructive secondary syphilis, sometimes might be misdiagnosed as pyoderma gangrenosum, and might occurs early in patient with Acquired Immune Deficiency Syndrome (AIDS) after primary infection[1]. A multicentric retrospective study found that 1.33% of HIV patients were concurrently infected with syphilis, of which 7.3% were malignant syphilis[2]. Despite its name, malignant syphilis is usually treated well after regular treatment [3].

## Abbreviations

WBC: White blood cell; CRP: C-reactive protein; ANCA: Antineutrophil cytoplasmic antibodies; HIV: Human Immunodeficiency Virus; EIA: Enzyme immunoassay; RPR: Rapid plasma regain; AIDS: Acquired Immune Deficiency Syndrome

## **Declarations**

## **Ethical Approval and Consent to participate**

Not applicable.

## **Consent for publication**

The patient provided written, informed consent for publication of the details of this case.

## **Availability of data and materials**

Not applicable.

## **Competing interests**

The authors declare that they have no competing interests.

## **Funding**

ShenYang Science and Technology Bureau (18-014-4-30 to Ying Wen)

## **Authors' contributions**

Yu Wang and Ying Wen treated the patient, made the clinical diagnosis, wrote and revised the manuscript. All authors have read and approved the final manuscript.

## **Acknowledgements**

We thank Ting Xiao (Dermatology of the First Affiliated Hospital of China Medical University), Ying Zhou (Infectious disease of the First Affiliated Hospital of China Medical University) for their professional assistance. We also thank the patient for agreeing to submit his case.

## **References**

1. Li JH, Guo H, Gao XH, Chen HD. Multiple skin ulcers from malignant syphilis. *Lancet*. 2015;386(10003):1564. doi:10.1016/S0140-6736(15)60157-X.
2. Schofer H, Imhof M, Thoma-Greber E, Brockmeyer NH, Hartmann M, Gerken G et al. Active syphilis in HIV infection: a multicentre retrospective survey. The German AIDS Study Group (GASG). *Genitourinary medicine*. 1996;72(3):176-81. doi:10.1136/sti.72.3.176.
3. Stoner BP. Current controversies in the management of adult syphilis. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 2007;44 Suppl 3:S130-46. doi:10.1086/511426.

## Figures

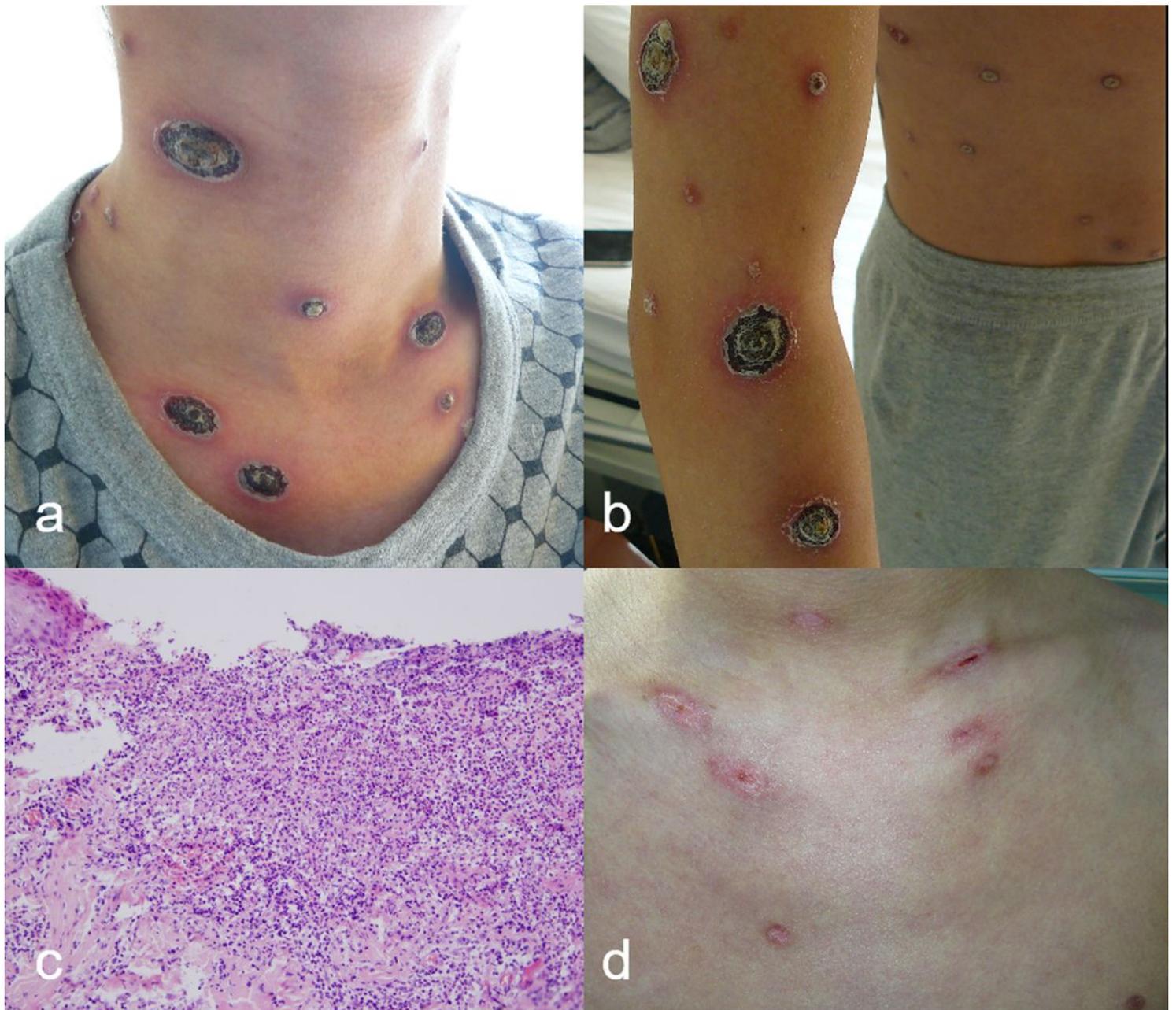


Figure 1

Multiple skin ulcerations scabbed with overlying brown–black rupioid crusts on the trunk (a) and extremity (b). The biopsy pathology of right forearm lesion (hematoxylin and eosin; original magnification ×200) (c). There are Scars on the trunk after treatment with benzathine penicillin for 3 weeks (d).