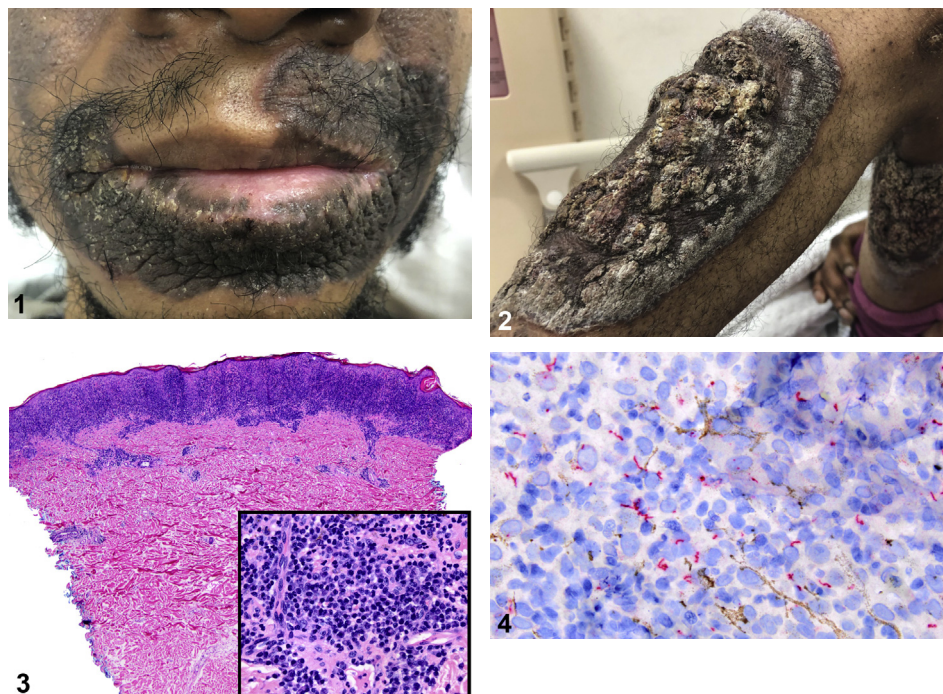


Hyperkeratotic plaques resembling an oyster shell



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HISTORY

A 34-year-old man with acquired immunodeficiency syndrome (AIDS) presented with 2 years of pruritic, slowly growing lesions after discontinuation of all antiviral medications. On examination, he had a cobblestoned, dark brown plaque on the perioral cutaneous and mucosal lip (Fig 1) and 2 large annular brown plaques with heaped-up mounds of scale and violaceous rims on the right shin and posterior thigh (Fig 2) with a smaller similar lesion on the scrotum. A skin biopsy of the perioral and right thigh plaques found a lichenoid infiltrate with numerous plasma cells (Fig 3). An immunostain is shown in Fig 4.

Question 1: What is the diagnosis?

- A. Psoriasis
- B. Majocchi granuloma
- C. Rupoid syphilis
- D. Hypertrophic lichen planus
- E. Lobomycosis

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Answers:

A. Psoriasis — Incorrect. Although psoriasis can have a rupioid morphology, the presence of spirochetes on immunostains supported an infectious diagnosis.

B. Majocchi granuloma — Incorrect. Majocchi granuloma is a deep folliculitis caused by a cutaneous dermatophyte infection. Skin scraping in this case had no growth in dermatophyte test media, and tissue cultures were negative for bacteria, fungus, and atypical mycobacteria.

C. Rupoid syphilis — Correct. This patient's rapid plasma reagin was reactive with a titer of 1:512, and his *Treponema pallidum* hemagglutination assay was positive. Rupoid syphilis is characterized by well-demarcated hyperkeratotic scaly plaques with a thick, adherent crust that resembles the back of an oyster shell.¹

D. Hypertrophic lichen planus — Incorrect. The presence of spirochetes on immunostains supported an infectious diagnosis.

E. Lobomycosis — Incorrect. Lobomycosis is a chronic fungal infection presenting with keloidal-like plaques. Round yeast-like structures were not seen on histology.

Question 2: Which of the following disease subtypes does this case best represent?

- A.** Congenital
- B.** Primary
- C.** Secondary
- D.** Tertiary
- E.** Endemic

Answers:

A. Congenital — Incorrect. Congenital syphilis is usually the result of transplacental infection of the fetus from an infected mother and has varied clinical manifestations including prematurity, rhinorrhea, and mucocutaneous lesions (in early congenital syphilis) and interstitial keratitis, neurosyphilis, bone disease, and cardiovascular disease (in late congenital syphilis).

B. Primary — Incorrect. The chancre, an indurated painless ulcer, is the initial lesion of syphilis and appears about 21 days after exposure.

C. Secondary — Correct. This patient has late latent secondary syphilis. Lesions of secondary

syphilis are protean in clinical presentation and histology and have easily identified organisms with immunostain, as seen in our patient.² The distinction between early and late latent secondary syphilis is based on whether the primary infection occurred within the past 12 months.

D. Tertiary — Incorrect. Cutaneous manifestations of late latent secondary and tertiary syphilis are notably different. Tertiary syphilis typically presents with granulomatous lesions without identifiable spirochetes on biopsy.

E. Endemic — Incorrect. Endemic syphilis is a form of nonvenereal syphilis and clinically presents with lesions in the oral and nasopharyngeal mucosa.

Question 3: The clinical morphology seen in this case has been reported in all of the following EXCEPT:

- A.** Psoriasis
- B.** Reactive arthritis
- C.** Scabies
- D.** Histoplasmosis
- E.** Dermatomyositis

Answers:

A. Psoriasis — Incorrect. Rupoid lesions have been reported in psoriasis.³

B. Reactive arthritis — Incorrect. Rupoid lesions have been reported in reactive arthritis.³

C. Scabies — Incorrect. Rupoid lesions have been reported in keratotic scabies.³

D. Histoplasmosis — Incorrect. Rupoid lesions have been reported in disseminated histoplasmosis.³

E. Dermatomyositis — Correct. Rupoid morphology has been described in association with all of the other answer choices including psoriasis, reactive arthritis, keratotic scabies, and disseminated histoplasmosis. Rupoid lesions of syphilis are most commonly seen in patients with varied degrees of immunosuppression including HIV, malnutrition, diabetes, or pregnancy.⁴

REFERENCES

1. Krase IZ, Cavanaugh K, Curiel-Lewandrowski C. A case of rupioid syphilis. *JAAD Case Rep.* 2016;2(2):141-143.
2. Lautenschlager S. Cutaneous manifestations of syphilis: recognition and management. *Am J Clin Dermatol.* 2006;7(5):291-304.

3. Chung HJ, Marley-Kemp D, Keller M. Rupioid psoriasis and other skin diseases with rupioid manifestations. *Cutis*. 2014;94(3):119-121.
4. Zhu K, Zhou Q, Han R, Cheng H. Acute monoarthritis in a delayed diagnosis of syphilis patient with persistent rupioid psoriasis-like lesions. *BMC Infect Dis*. 2012;12:338.