

A Case of cutaneous coccidioidomycosis with a distinctive dermatological presentation A. Robitaille¹, B. Tatar¹, U. Nagin², P. Georgiescu²

Midwestern University

Introduction

Coccidioidomycosis, also known as San Joaquin Valley Fever, is typically caused by inhalation of the fungi *Coccidioides immitis* and *Coccidioides posadasii*. It is commonly found in the Southwestern United States, Mexico, and South America. Cases tend to be confined to the pulmonary system, however, extrathoracic dissemination may occur to the skin, bones, joints, peritoneum, and nervous system. There are approximately 150,000 cases of coccidioidomycosis cases diagnosed annually. In this case, we present a 26year-old black male who presented with a worsening cough, fever, and multiple skin lesions.

Case

The patient reported a cough that began 4 months ago but had been resistant to antibiotic treatment for lobar pneumonia from his primary care provider. Initially, the cough was non-productive, however, in the last month, it became productive of clear-to-white mucoid sputum. A physical exam revealed four scabbing and ulcerated erythematous papules on the right upper extremity, the distal left thigh, the left neck, and the posterior scalp. CTA with contrast showed enlarged mediastinal and bilateral hilar LAD, mild splenomegaly, and bilateral pulmonary micronodules.

Figures

¹ Midwestern University, ² Abrazo Health System



Figure 1. Left-sided sub mandibular healing papule with skin hypopigmentation



Figure 2. Left flank erythematous papules in multiple stages of healing.



This case provides further insight into the unique presentations of cutaneous coccidioidomycosis. The literature has referred to coccidioidomycosis classically as the "great imitator" when presenting with cutaneous findings. Skin manifestations typically present in three different scenarios. First and most commonly, because of acute pulmonary infection which is classified as a reactive skin manifestation in which the skin does not contain visible organisms. Secondly, in this case, skin findings are organism-specific and occur due to hematogenous spread. And lastly, in rare cases, cases can present from primary inoculation. In this patient, we demonstrate a rare case of hematogenous secondary spread of spherules to multiple skin locations causing ulcerating and scabbing papules.

Conclusions

Recognition of cutaneous coccidioidomycosis in regions where it is endemic can prove vital to early diagnosis and treatment of the disease and can significantly improve patient outcomes. Additionally, distinct dermatological conditions can present visually distinctly on individuals with different skin colors. Therefore, representation in the literature is important to early identification, diagnosis, and treatment.

References

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Figure 3. Left arm scabbing papule.



Figure 4. Right arm recently appearing erythematous papules.