

14<sup>th</sup> International Conference on

## Clinical and Experimental Dermatology

June 19-20, 2017 Philadelphia, USA

**An unusual skin reaction revealing the diagnosis of “the great imitator”****Alvaro J Ramos-Rodriguez, Lauren Bonomo, Paul T Kröner and George Mckinley**  
Icahn School of Medicine at Mount Sinai, USA

**Background:** A reaction to the treatment of syphilis was noted as early as the 15<sup>th</sup> century when arsenic was utilized as therapy. This classical reaction is known as the Jarisch-Herxheimer reaction (JHR) and is thought to occur secondary to antigen release and immune-complex formation after treponemal death. It is characterized by development of fever, tachycardia, hypotension and exacerbation of underlying cutaneous lesions within hours of antimicrobial administration. We present a rare case of a classical Jarisch-Herxheimer reaction revealing the unexpected diagnosis of advanced syphilis.

**Clinical Case:** A 30-year-old African-American male was brought to the emergency room with generalized weakness, unsteady gait and watery diarrhea for one month. Past medical history was unremarkable. On examination, he was ill-appearing and cachectic. Skin exam showed mildly noticeable 1 x 1 cm hyperpigmented macules on the trunk and palms. The rest of the exam was within normal limits except for generalized weakness and mild nuchal tenderness. Routine laboratories were unremarkable except for a positive rapid HIV test. Later in the hospitalization, the CD4 count resulted as 1 cell/ml and the patient was started on highly active antiretroviral therapy (HAART) regimen and azithromycin for possible disseminated *Mycobacterium avium* complex (MAC). Six hours after the administration of azithromycin, the patient developed severe hyperpyrexia (42.7°C), and tachycardia, and his skin lesions became accentuated (Image 1). Given the timing of the hyperpyrexia and worsening skin eruption after antimicrobial administration, a Jarisch-Herxheimer reaction (JHR) was strongly suspected. *Treponema pallidum* IgG was 8.4; he was thus diagnosed with JHR and secondary syphilis. The patient was adequately treated with weekly doses of intramuscular penicillin for three weeks with excellent clinical improvement.

**Conclusion:** Approximately 25% of patients with AIDS have syphilis. Given the wide spectrum of clinical presentations, syphilis often poses a diagnostic challenge to physicians. This case highlights how an unexpected Jarisch-Herxheimer reaction in a patient with AIDS uncovered the diagnosis of secondary syphilis and prompted the rapid initiation of adequate life-saving treatment. Skin rash accentuation in relation to antimicrobial administration was paramount. We conclude that physicians should have a strong suspicion for syphilis in all patients with AIDS and a skin rash.



**Figure 1:** Jarisch-Herxheimer reaction skin eruption

**Biography**

Alvaro J Ramos-Rodriguez, MD, is currently a Medicine Resident Physician at the Icahn School of Medicine at Mount Sinai West. He is the author of recently published textbook, “*Dermatology for the USMLE*”. He has dedicated a major part of his medical career to teaching and helping students prepare for the USMLE, including teaching review courses. His interest in dermatology includes DRESS syndrome, toxic erythema of chemotherapy, atopic dermatitis, psoriasis and infectious skin disorders.

Alvaro.Ramos-Rodriguez@mountsinai.org