

## [ PICTURES IN CLINICAL MEDICINE ]

## Erythema Migrans-like Rash Mimicking Lyme Disease

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Picture.

A 48-year-old man presented with a fever, fatigue, arthralgia, and rash that had appeared 2 days after he returned from Papua New Guinea. He denied any tick exposure during his travel but recalled walking in the bushes during the daytime. A physical examination revealed a body temperature of 37.7 °C and erythema migrans-like rash on his left posterior thigh (Picture), but the findings were otherwise unremarkable. Serologic testing of blood samples for Lyme borreliosis was negative. In addition, polymerase chain reaction tests of blood and wound samples for both Lyme borre-

liosis and a relapsing fever were negative as well. The patient fully recovered with doxycycline. Since Papua New Guinea is non-endemic for Lyme disease, we clinically suspected this to be a case of southern tick-associated rash illness (STARI). It is difficult to distinguish STARI and Lyme disease solely based on the clinical appearance, since both diseases present with a circular rash (1). *Borrelia lonestari* was once hypothesized to be the pathogen for STARI, but the etiological agent for STARI has not been conclusively identified (2).

The authors state that they have no Conflict of Interest (COI).

## References

- Masters EJ, Grigery CN, Masters RW. STARI, or Masters disease: Lone Star tick-vectored Lyme-like illness. Infect Dis Clin North Am 22: 361-376, 2008.
- Wormser GP, Masters E, Liveris D, et al. Microbiologic evaluation of patients from Missouri with erythema migrans. Clin Infect Dis 40: 423-428, 2005.

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