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New Lyme Disease Guidelines for Erythema Migrans Lesions Miss the Mark

To the Editor:

If the primary treatment goal for managing patients with erythema migrans (EM) rashes is to restore patients to their pre-Lyme health status, then the guidelines endorsed by Auwaerter et al[1] are both inadequately sourced and potentially dangerous.[2] Of the 2 trials cited by the authors in support of a 10-day doxycycline regimen, only 1 is applicable to US patients. In that study, almost half of the subjects in each arm failed to complete the 30-month trial.[3] At the 12-month observation point, 72% (44 out of 61) had a complete response to therapy, suggesting that this regimen is not highly effective and puts many at risk for post-treatment sequalae that adversely impact quality of life.[4] The other study was conducted in Europe.[5] Due to differences between the US and European Lyme-inducing *Borrelia* species,[6,7] its findings are not generalizable to US patients and should not be used to guide treatment decisions in the United States.[2]

Missing from the guidelines and the authors' discussion regarding the utility of 10 days of doxycycline is the prospective study by Massarotti et al,[8] where the clinical failure rate was 36% (8 out of 22). With regard to amoxicillin and cefuroxime, there is no US trial data to support the recommended 14-day duration; clinicians should be told that the US trials investigating these agents as monotherapy used 20-day regimens.[2] Additionally, several US EM investigators observed that patients with multiple EM lesions were at higher risk of long-term treatment failure,[2] yet the guidelines the authors promote fail to acknowledge or act on those insights.

It is challenging to provide evidence-based medical care when there is little or no high-quality evidence to rely on. It is harder still when influential authors promote inadequate guidelines without meaningfully disclosing their shortcomings. Clinicians and their patients deserve better.

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