

Lyme Disease Masquerading As Cellulitis:

An Atypical Manifestation of Erythema Migrans Confounded by Jarisch-Herxheimer Reaction

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Introduction

Lyme disease is classically associated with the characteristic skin finding, erythema migrans.

Presentation

- A 79-year-old female presented with an erythematous rash containing central vesicles localized to the posterior left knee.
- She was prescribed doxycycline for presumed cellulitis, but developed worsening symptoms, including fevers, diaphoresis, body aches.
- Therefore, admitted & started on IV cefazolin.
- Patient was evaluated by infectious disease who diagnosed her with Lyme Disease with atypical erythema migrans.

Outcomes

- Antibiotics were switched back to doxycycline.
- She had worsening constitutional symptoms, including body aches and diaphoresis, thought to be due to Jarisch-Herxheimer reaction, which likely accounted for her initial presentation.
- Symptoms resolved with supportive care.
- Completed 10-day course of antibiotics.



Fig 1. Photograph of patient's left posterior knee with erythematous rash containing centrally located vesicle-like lesions.

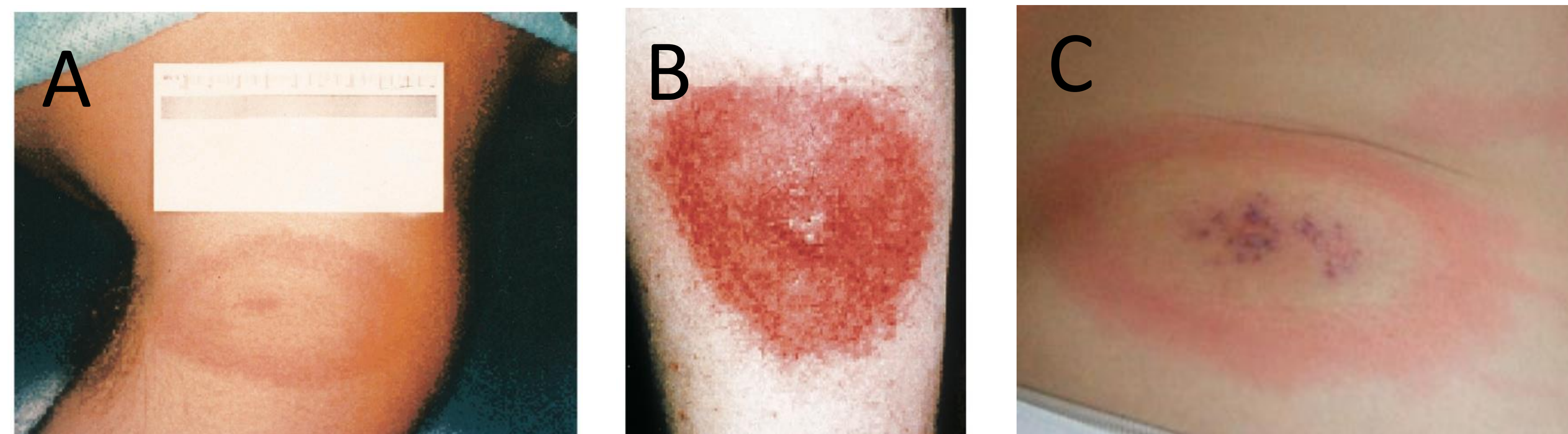


Fig 2. Various manifestations of erythema migrans. (A) Classic bull's eye lesion (B) Homogenously erythematous (C) Central vesiculations.

Discussion

- Presentations of erythema migrans are varied.
- Bull's eye lesion: only 9% of cases (**Fig 2A**).
- More commonly, it can appear homogenously erythematous reminiscent of cellulitis or erysipelas (**Fig 2B**).
- Less commonly, ulcerations and vesicles may be seen (**Fig 2C**).
- Accurate diagnosis and treatment is necessary given the potential for cardiac and neurologic complications.
- Treatment has its own consequences manifesting as Jarisch-Herxheimer reaction – a systemic reaction to endotoxins released by dying spirochetes.

Conclusion

Manifestations of erythema migrans are important to recognize in order to accurately diagnose Lyme Disease. Clinicians should be aware of the potential paradoxical worsening of symptoms seen in Jarisch-Herxheimer reaction.

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