EDUCATIONAL OBJECTIVES
1. To understand the range of diseases transmitted by the *Ixodes scapularis* (deer tick).
2. To understand the Infectious Diseases Society of America’s current guidelines for the prevention of Lyme Disease and some of the limitations of these recommendations.
3. To understand an alternative treatment for *Ixodes scapularis* (deer tick) bites in the upper Midwest as proposed by the author.

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QUESTIONS
1. The following diseases may be transmitted by the *Ixodes scapularis* (deer tick):
   A. Lyme disease
   B. Human monocytic ehrlichiosis (HME)
   C. Human granulocytic anaplasmosis (HGA)
   D. Babesiosis

   Answer:
   - A and B
   - A and C
   - A and D
   - A, C, and D
   - All of the above

2. The Infectious Diseases Society of America’s (IDSA) current guidelines for the prevention of Lyme disease following a tick bite include the following:
   A. The involved tick should be an adult or nymphal *Ixodes scapularis* (deer tick).
   B. The tick attachment time based on engorgement or known time of bite is greater than 12 hours.
   C. The bite occurred in an area where greater than 10% of the ticks are known to be infected with *Borrelia burgdorferi*, the etiologic agent of Lyme disease.

   Answer:
   - A
   - A and B
   - A and C
   - A and D
   - All of the above

3. Problems concerning the IDSA’s current guidelines for antibiotic prophylaxis of *Ixodes scapularis* (deer tick) bites using a single dose of doxycycline include the following:
   A. It is based on a clinical trial that was unable to demonstrate treatment effectiveness for Lyme disease prevention but did document the development of seronegative Lyme disease when treatment failed.
   B. The effectiveness of this strategy on the diagnosis and treatment of patients with anaplasmosis is unknown.
   C. The identification of the tick species and the documentation of the attachment time may be difficult to establish in a clinical setting.

   Answer:
   - A and B
   - B and C
   - A and C
   - A and D
   - All of the above

4. The author of this article suggests that the clinician who is practicing in the upper Midwest consider treatment for *Ixodes scapularis* (deer tick) bite with a full course of doxycycline (100 mg twice daily for 10 to 20 days) in those patients in whom there is no contraindication in view of the concern of adequate treatment for *Borrelia burgdorferi* with a single dose of doxycycline and the possible coexistent infection with *Anaplasma phagocytophilum*.

   Answer:
   - True
   - False