

STARI: Southern Tick-Associated Rash Illness – Dr William Simpson

- a) Lyme Disease
 - i) Leading vector-borne disease in US
 - (1) Caused by *Borrelia burgdorferi*
 - (2) ~12,000 cases per years
 - (3) First described in 1975
 - ii) Carried by *Ixodes scapularis* – primarily the nymphal stage, also adults
 - iii) Distribution heaviest in New England, Middle Atlantic, and Midwest
 - iv) Peak season – spring, summer
 - v) Incubation period 3-10 days
 - vi) Illness
 - (1) Fatality rate low (if ever)
 - (2) Asymptomatic cases common
 - (3) Chronic infection controversial
 - (4) Targeted organs
 - (a) CNS
 - (b) Cardiac
 - (c) Synovial
 - (5) Diagnosis
 - (a) History and physical
 - (b) ELISA
 - (c) Western blot
 - (6) Erythema migrans
 - (a) 60-70% cases have this
 - (b) >5 cm
 - (c) At site of bite
 - (d) May be multiple
 - (e) “bull’s eye” with clear center usual
 - (f) Expands
 - (g) Can be confused with allergic reaction to tick bite
 - (7) Therapy
 - (a) Prophylaxis not indicated except in NE and MI
 - (b) Doxycycline 100mg PO BID x 21-30 days
 - (c) Alternatives available
- b) STARI
 - (1) Also has an erythema migrans rash
 - (2) Deer tick feed on reptiles in the south, not on deer or mice
 - (3) Many tick bites in the south are associated with *Amblyomma americanum*
 - (4) Vector likely to be *A americanum* (adult)
 - (5) Etiologic agent – might be *B lonestari*
 - (6) Differences
 - (a) STARI happens earlier in year
 - (b) More likely to recall a tick bite (bigger tick)
 - (c) Bite to lesion time shorter (6 vs 10 days)
 - (d) Less likely to be symptomatic

- (i) Less likely to be chronic
 - (ii) Fewer CNS symptoms
 - (iii) Less likely to have arthritis
 - (e) Less likely to have multiple EM lesions
 - (f) EM lesions smaller
 - (g) More likely to have central clearing
 - (h) Treatment
 - (i) Same as Lyme
 - (ii) No reported chronic illness
 - (i) CDC STARI study
- c) Other tick-borne diseases
 - i) Babesiosis – does not respond to tetracycline
 - ii) Anaplasmosis
- d) Prevention
 - i) Use permethrin on clothing
 - ii) Use DEET-based repellent
 - iii) Wear protective clothing
- e) Attached tick
 - i) Remove correctly
 - ii) Monitor site for 30 days
 - iii) Send the tick for ID/testing if available
- f) Agromedicine Program
 - i) MEDULINE 800-922-5250
 - ii) www.musc.oem/edu