Tickborne Illness in Southwest Virginia

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Tickborne Illness in VA

- Lyme
- Rocky Mountain Spotted Fever
- Tularemia
- Ehrlichiosiosis
- Anaplasmosis
- Southern Tick-Associated Rash Illness
- Babesiosis
- Alpha Gal (Red Meat Allergy)
Rash ?
Stroke?
Flu?
Syncope?
Knee pain?
Tick Bite or Removal?

- Embedded tick
- Tick removal, step 1
- Tick removal, step 2
Lyme Disease

• *Borrelia burgdorferi*, is spread through the bite of infected blacklegged ticks (or deer tick, *Ixodes scapularis*).
Early Localized

– Within 30 days of bite
– Erythema migrans at site 7-14 days after tick removal
– Fatigue, myalgias, arthralgias, headache, fever, chills, neck stiffness
Disseminated Infection

• Early:
  – Weeks to months after bite
  – Musculoskeletal symptoms
  – Neurologic symptoms
  – Cardiac Symptoms

• Late:
  – Months to years with latency
  – Musculoskeletal
  – Neurologic symptoms
2017 Reported Lyme Cases

https://www.cdc.gov/lyme/datasurveillance/maps-recent.html
Regional Treatment

- 2013-2015 Retrospective chart review within Carilion Clinic via EPIC
  - “Lyme” or “tick bite”
- 186 cases with clinical evidence of Lyme
  - 2 (1%) not prescribed antibiotics
  - 17 (9%) prescribed inappropriate antibiotics
Challenges:

- Masquerades as other diseases
- No recollection of tick bite
- Tick identification
- Regional disparities
- No rapid testing
- Tests often negative in first week of symptoms
- Limited follow up
Questions?