Lyme Disease Prevention in Western Connecticut

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Lyme Disease Prevention in Western Connecticut

Tyler Oe
Larner College of Medicine at UVM – Family Medicine Clerkship
Newtown Primary Care
June 2018
The problem? Lyme Disease

Lyme disease is caused by the bacteria *Borrelia burgdorferi* and is spread by *Ixodes scapularis*, the deer tick.

Lyme disease can cause a systemic infection that is mostly responsive to antibiotic therapy.

The goal is to increase the awareness of Lyme disease and to educate patients on the proper preventative techniques to decrease the chances of being bit by a tick.
Lyme Disease is Costly; proper identification is necessary.
What does the Office Think?

“Lyme can be debilitating. People are constantly struggling to get the right care. Patients can definitely be better educated about Lyme disease. Also, more information on Babesiosis would be beneficial. All of these different tick-borne diseases can be complex.” 
Amy Ricketts, CMA

“There’s a lot of conflicting information out there about Lyme disease. Sometimes it feels like we are taking shots in the dark when it comes to diagnosing and treating. The understanding of Lyme is still in its infancy.” 
Hannah Fishchetto CMA
Lyme Disease Cheat Sheet

What’s Lyme Disease?
Lyme disease is caused by the bacterium Borrelia burgdorferi and is spread by the black-tick. Ticks infected with the bacteria can attach themselves to a host and will feed on the host for a period of time, transferring the bacteria into the host's blood. Once the bacteria enter the bloodstream, they can spread throughout the body, affecting various parts of the body. Lyme disease is diagnosed through blood tests that measure antibodies to the bacteria.

How to Prevent Lyme Disease
There is no vaccine currently available to prevent Lyme disease, but there are measures you can take to reduce your risk:

1. Remove the risk: Avoid tick-infested areas.
2. Use a tick repellent: Apply a tick repellent containing 20% DEET to exposed skin before going outdoors.
3. Use clothing that covers: Wear long-sleeved shirts and pants, and tuck your pants into your socks.
4. Perform thorough tick checks: After returning from tick-infested areas, check your body for ticks. If you find a tick, remove it immediately by gripping the tick with a pair of tweezers and pulling it straight up, avoiding squeezing the tick.

How to Remove a Tick

1. Use a tick removal tool or a needle to grasp the tick near the skin.
2. Firmly grasp the tick with your thumb and index finger.
3. Pull the tick straight up from the skin.
4. Wash your hands after removing the tick.

Prepared by: Taylor On
Lauren College of Medicine at TNM – Online, National Diploma in Nursing, Primary Care
June 2022

Signs and Symptoms of Lyme Disease

1. Early-stage Lyme disease can include:
   - Rash (bull’s-eye rash)
   - Flu-like symptoms
   - Headaches
   - Fatigue
   - Muscle pain

2. Late-stage Lyme disease can include:
   - Joint pain and swelling
   - Heart problems
   - Nervous system problems
   - Cognitive difficulties

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Intervention and Methodology

Treatment of Lyme Disease

1. Antimicrobial therapy: Antibiotics are prescribed to treat Lyme disease.
2. Lyme disease treatment is usually given for 2-4 weeks.
3. Follow-up appointments are recommended to monitor the patient's progress.

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References

The handout was given to the office as an additional resource on Lyme.

Patients interested in more information will be referred to the handout to exercise preventative measures.
Evaluation of a Lyme Disease Handout

We can establish the effectiveness of prevention techniques by cross referencing the amount of Lyme cases reported from one year to the next.

A questionnaire could have been employed before the handout to pre-assess the patients’ understanding of Lyme disease and the steps they can take to protect themselves.

Patients can self report to their provider if they found the handout beneficial in their understanding of Lyme disease.

Limitations: short time frame, abridged information on Lyme, undiagnosed cases of Lyme.
Recommendations

• All patients with a significant environmental exposure should be made aware of the dangers of Lyme and should be directed to the handout for further information

• Integration into the patient portal will allow for more streamlined dissemination of the handout

• The handout should also be hung up in the exam rooms during the months of peak Lyme to provide even further exposure to the ways a patient can protect themselves


disease&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3.


Written Project:
Students are required to submit a 10-slide PowerPoint summarizing their community project at the end of their clerkship. The first nine slides should summarize the community project and should be uploaded to ScholarWorks separately from page 10. Slide 10 will state the following: Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Yes / No
If not consenting as above: please add the interviewee names here for the department of Family Medicine information only.

Name:
If you received informed consent, please upload page 10 as a separate document entitled: "Name of Project/Interview Consent Form." If an informed consent was not received, please do not upload the consent page to ScholarWorks. However, you should include the consent page when submitting your PowerPoint to the Family Medicine Department.

These projects must be submitted electronically to the Clerkship Coordinator, Luke Hebert, at Luke.Hebert@memu.mc.edu no later than the morning of the final day, prior to sitting for the exam. Late projects receive an automatic 5 point deduction prior to faculty scoring.