

Take 3 – Practical Practice Pointers[®] August 12, 2019 Edition

Lyme Disease, Prostate CA Decision Aids, Avocado Knife Injuries

From the Guidelines

1) Prevention, Diagnosis, and Treatment of Lyme Disease

The Infectious Diseases Society of America, American Academy of Neurology, and American College of Rheumatology have issued new draft guidelines on Lyme disease, intended to update their 2006 guideline. The comment period closes August 10th.

Notable Recommendations Include:

- Prevent tick bites by using DEET, picaridin, IR3535, oil of lemon eucalyptus, or permethrin. (strong recommendation, moderate quality evidence)
- Recommend against testing asymptomatic patients for exposure to *B. burgdorferi* following an Ixodes tick bite. (strong/moderate-quality)
- Recommend prophylactic antibiotic therapy (a single dose of oral doxycycline) be given within 72 hours of removal of an identified high-risk tick bite, but not for bites that are equivocal or low risk (strong/high quality). High-risk bites must meet all of the following criteria: from an Ixodes tick, in a highly endemic area, and from a tick engorged and attached for 36 hours or more. If the bite cannot be classified with a high level of certainty as a high-risk bite, a wait-and-watch approach is recommended.
- For prophylaxis of high-risk bites, the recommended dose of doxycycline is 200 mg for adults and 4.4 mg/kg for children up to 200 mg maximum.
- In patients with skin lesions comparable to erythema migrans, recommend clinical diagnosis over laboratory testing. (strong/moderate-quality).
- For erythema migrans, preferred treatments include 10 days of doxycycline or 14 days of amoxicillin, cefuroxime axetil, or phenoxymethylpenicillin. (strong/moderate-quality). If the patient cannot tolerate either, azithromycin would be recommended (7-day course)
- For patients presenting with meningitis, painful radiculoneuritis, mononeuropathy multiplex, or acute cranial neuropathies, along with plausible exposure to high-risk ticks, Lyme testing is recommended. (strong/moderate-quality). Routine testing is not recommended for patients with other neurological syndromes or psychiatric illnesses. (strong/low quality)
- Recommend against routine testing in children presenting with developmental, behavioral, or psychiatric disorders. (weak/low-quality)
- Recommend against the use of additional antibiotics in patients with persistent or recurring nonspecific symptoms (e.g., pain, fatigue, cognitive impairment) after treatment for Lyme disease but who lack objective evidence of reinfection or treatment failure. (strong/moderate-quality)

The guideline also includes information on diagnosis and treatment of Lyme carditis and arthritis, as well as “chronic Lyme” and common Lyme co-infections (in North America, there are 6 additional pathogens besides *B. burgdorferi* that are transmitted by the Ixodes scapularis tick). There is also extensive information on the intricacies of laboratory testing and nuances of interpreting the results of such testing.

My Comment:

Given how prevalent Lyme disease and other tick-borne illnesses have become, and the controversy surrounding the diagnosis and treatment of them, this updated guideline is welcome and well overdue. Though in draft form, I felt compelled to share it since we're still in "tick season." I'll share the final version when it is released, though it is doubtful there will be significant changes from the draft.

The sections on laboratory diagnosis and "chronic Lyme" are worth the read for those of you who are seeing/diagnosing this regularly. Understanding "what we know" based on the evidence can be very helpful when dialoging with patients about this often emotionally-laden topic.

Reference:

Lantos P, et al. 2019 Draft Guidelines for the Prevention, Diagnosis, and Treatment of Lyme Disease. [DRAFT Guideline](#)

From the Literature and Follow-up**2) Decision Aids for Prostate Cancer (PCa) Treatment Choice**

Studies have shown that men's choice of whether to undergo prostate cancer screening is sensitive to their values and preferences: that is, fully informed men will make different choices depending on their experience and perspective. For such decisions, shared decision-making (SDM), characterized by cooperative communication between patient and clinician in which they share knowledge, values, and preferences, represents an ideal approach to decision-making. Major guidelines therefore acknowledge the importance of informing men about the risks and benefits of PSA screening. The USPSTF has recently recommended that the decision to undergo prostate cancer screening should be an individual one in which men should discuss potential benefits and harms with their clinician before screening and recommended that men who do not express a clear preference for screening should not be screened.

This systematic review and meta-analysis was undertaken to estimate the association of decision aids with decisional outcomes in PCa, reviewing randomized trials comparing the use of decision aids prior to PCa screening with usual care. The authors reviewed 19 randomized clinical trials (12,781 men) and found that decision aids are probably associated with a small reduction in decisional conflict and are possibly associated with an increase in knowledge. Decision aids are possibly not associated with whether physicians and patients discuss prostate cancer screening and with actual screening decisions. Results suggest that further progress in facilitating effective SDM may require decision aids that not only provide education but are specifically targeted to promote shared decision-making between the patient and clinician.

By synchronicity, a very thoughtful Commentary on SDM was published in the July 25 JAMA. Practical suggestions for enhancing SDM included:

- Include Specificity of the Task in Calls for SDM: Calls for SDM in guidelines and recommendations alone, which appear to be becoming more common, are insufficient. To be meaningful, a specific recommendation for SDM should clearly outline the particular values likely involved, as well as the risks, benefits, and consequences, of different decisions for patients. Such an approach could better

position clinicians to understand the rationale for SDM and help prioritize it along with other issues and concerns.

- Use Decision Aids: Increasing the availability and routine use of patient decision aids could help patients engage more meaningfully in SDM (comment – but perhaps not. See above).
- Prioritize Decisions That Require SDM: It is impractical to engage explicitly in SDM for every clinical decision. A standard for SDM that all decisions should be shared, even routine and obvious ones (such as managing cellulitis with antibiotics), seems impossible to meet and would likely frustrate clinicians (and potentially patients) aiming to deliver good care.
- Create an Interpersonal Environment That Facilitates Engagement: The ideal environment for SDM is egalitarian and respectful and persists throughout the medical encounter.
- Give Personal Recommendations With Prudence: Some communication models regarding SDM seem asynchronous with the moral intuitions of clinicians, which may contribute to underutilization of SDM. For example, strict SDM standards do not include behaviors that provide emotional support to help patients make decisions. Some standards for SDM even discourage clinicians from making a recommendation at all. However, patients often want a recommendation, and failure to provide one could create substantial emotional distress for the patient as well as conflict for the clinician concerned about unduly influencing patients by imposing their own values.

My Comment:

The recommendations for the use of SDM, both from professional/governmental organizations and guidelines, appear to be ahead of the science as to how best to implement it, as is demonstrated by the study reviewed above. I therefore greatly appreciated the thoughtful commentary discussing how we might take a more practical approach to the process of helping to enhance patient's active involvement in their care. For those who have not read anything on the topic, this brief article (2nd reference) would be a great place to start.

References:

- Riikonen JM et al. Decision Aids for Prostate Cancer Screening Choice: A Systematic Review and Meta-analysis. JAMA Intern Med. 2019 Jun 24. [Article](#)
 - Beach M and Sugarman J. JAMA Viewpoint: Realizing Shared Decision-making in Practice. JAMA. Published online July 25, 2019. [Article](#)
-

From the Literature (because I just had to review this article ...)

3) Avocado-related Knife injuries

Recent media reports have described an increased prevalence of knife injuries sustained while preparing avocados. This has become common enough that it has been given the name “avocado hand.” However, this rise has not been reported in the literature. The purpose of this study was to describe, quantify, and trend emergency department (ED) encounters associated with avocado-related knife injuries.

This study used the National Electronic Injury Surveillance System (NEISS) to query for reports of avocado-related knife injuries from 1998 to 2017. There were an estimated 50,413 avocado-related knife injuries reported from 1998 to 2017. The incidence of avocado-related knife injuries increased over this time period and the increase correlated closely with a rise in avocado consumption in the U.S. Women comprised 80% of injuries. The most common demographic injured were 23 to 39-year old females (33%). Injuries were much more common on the left (and likely non-dominant) hand.

The authors concluded that avocado-related knife injuries are a preventable cause of hand injury. The incidence has risen significantly in recent years, possibly due to an increased consumption of avocados. Education on safe avocado preparation techniques and public safety initiatives, such as warning labels, could help prevent serious injuries in the future.

My Comment:

Just the thought that avocado-related knife injuries are tracked makes me smile ...

For those who have cut an avocado, you will appreciate that doing so is a unique experience and fraught with risk. It should not be surprising, therefore, that doing so has caused an increased number of injuries.

Perhaps the recently reported “avocado shortage” will help to mitigate these injuries, though it has apparently also resulted in a new phenomenon, a “fruit crime wave” (in New Zealand, of all places - [story](#)). It has also created a new demand for “fake guacamole” recipes, or “mock guac.” Don’t be fooled

References:

- Farley K, et al. Avocado-related Knife Injuries: Describing an epidemic of hand injury. Am J of Emer Med. Published ahead of print July 2019: [Article](#)
- Video: How to Safely Cut an Avocado (California Avocado): [Video](#)

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

Mark

Carilion Clinic Department of Family and Community Medicine