

Background

Tick bites are seldom seen on the West Coast of the United States (Washington, Oregon, California). A recent study analyzing the data collected through the *TickReport* program at the University of Massachusetts, Amherst concluded that West Coast residents traveling to the Northeast United States are at higher risk of being bitten by an infected tick when compared to similar West Coast residents without significant travel history.¹ Of particular medical significance is the tick genus *Ixodes*. *Ixodes* ticks are vectors that are commonly implicated in a wide variety of tick-borne human pathogens (Table 1).^{2,3} On the West Coast of The United States, the *Ixodes pacificus* (Western Blacklegged Tick) is the primary vector species of tick-borne pathogens (Figure 1).⁴ The greatest risk factors for tick bites of any species is outdoor activity with exposed skin and without the use of insect repellent. Though the overall incidence of tick-borne disease on the West Coast is low at 1% of tick bites, bites do still occur and should be promptly identified and treated to prevent future complications from untreated tick-borne pathogens.⁵

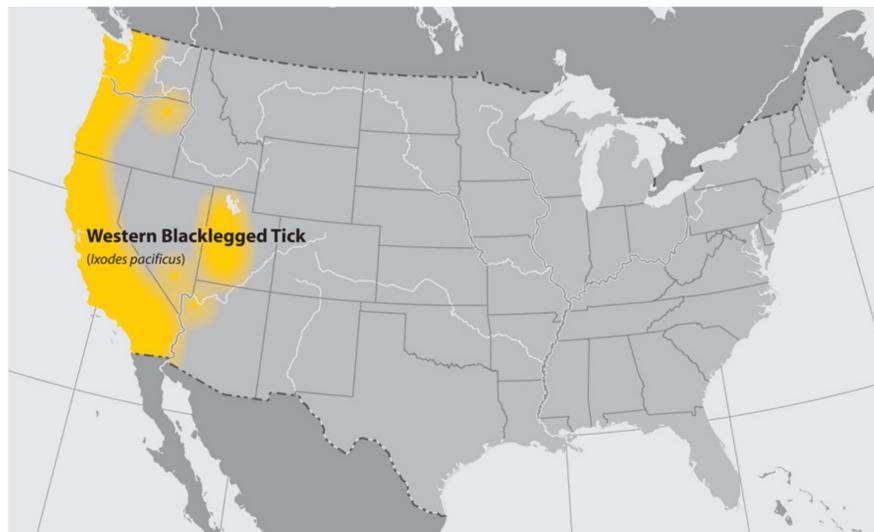


Figure 1. The prevalence of the *Ixodes pacificus* tick species. (Image credit: Centers for Disease Control)

Common *Ixodes* Tick-borne Pathogens

Anaplasmosis	Babesiosis
<i>Borrelia miyamotoi</i> Disease	Ehrlichiosis
Lyme Disease	Powassan Virus

Table 1. Tick-borne diseases highly associated with vector transmission via *Ixodes* genus ticks.

References

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Case Presentation

A 60-year-old male with a past medical history significant for melanoma presented for a new-onset skin lesion with rash. The lesion arose approximately 1 week prior on his subxiphoid chest with increasing size. The lesion appeared to be a non-healing sore which intermittently bled. It was surrounded by evanescent papules across the chest with occasional urticaria. There was associated pruritus, stinging pain, and mild erythema on the hands and chest. He denied any recent travel or any factors worsening or alleviating his symptoms.

On physical examination, a 7-mm exophytic, hyperkeratotic papule with surrounding circumferential ecchymoses was noted without active urticarial lesions (Figure 2). No other significant physical exam findings were observed. A shave biopsy was obtained and sent to dermatopathology for histopathologic evaluation. He was provided with a prescription for triamcinolone acetonide 0.1% topical steroid cream and instructions to avoid irritation of the lesion. Histological examination of the biopsy showed an ectoparasite attached via proboscis to the cutaneous surface with morphological features consistent with an attached tick. The lesion was cleaned, and remnants removed. Lyme serologic testing was negative. To date, the patient remains without systemic symptoms or signs of tick-borne disease.

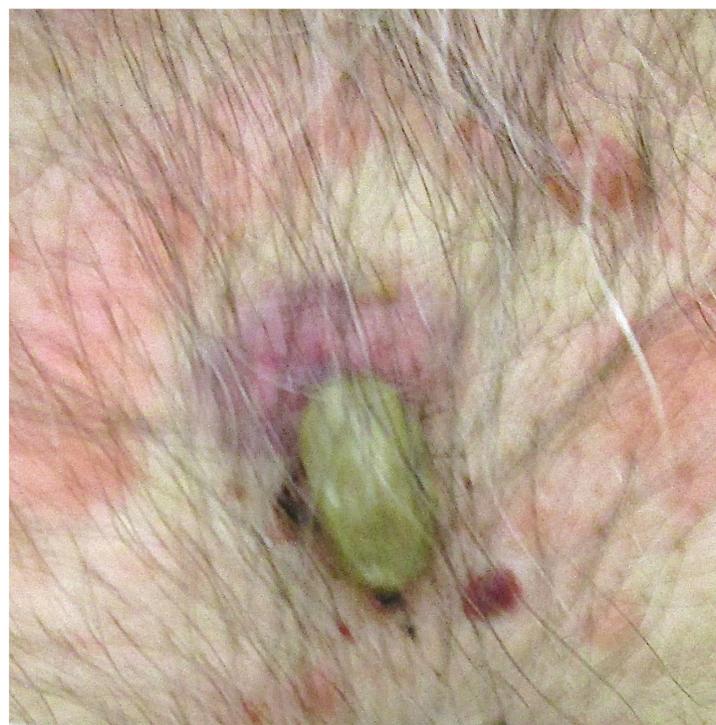


Figure 2. The presenting 7-mm subxiphoid skin lesion in our patient with noted surrounding erythema and ecchymoses.

Conclusion

Our case of an elderly male with no travel history to the classic regions of the United States with endemic tick-borne disease should remind clinicians that bites can still occur on the West Coast. Suspicion should be high to treat exposure early to prevent serious complications of untreated disease. *Ixodes pacificus* tick bites usually present between March and August with a peak in June.¹ West Coast clinicians or clinicians with patients who travel to the West Coast should not discount the possibility of tick-borne disease despite the region's lower incidence. Additionally, it is never a bad idea to educate patients, especially those who are active outdoors in the spring and summer, in tick bite prevention using strategies such as insect repellent and protective clothing which covers any exposed skin and to routinely check for attached tick.⁶