

SHORT COMMUNICATIONS

Herpes Simplex Masquerading as Bacterial Lymphangitis

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A 46-year old healthy Caucasian female with a history of Crohn's disease (currently in remission) presented to the emergency department with a 2-week history of painful and pruritic rash affecting the right 5th finger, upper extremity, and neck. Pruritis began initially ten days prior to presentation. Subsequently, three days prior to presentation, patient experienced sudden onset pain and erythema of the right 5th finger with progression along her right forearm. She noted that her symptoms were worsening but was not able to identify any alleviating or aggravating factors. Extensive review of systems was otherwise negative, except for lymphadenopathy. She denied recent travel or exposure to raw foods, poison ivy, rose bushes, rodents, or new medications; however, she noted that she lived in a barn and had direct contact with horses, cats, and dogs.

Physical exam was notable for a very painful, ulcerated pink plaque with serosanguinous crust and surrounding erythema with few pustules at the periphery on the right anterior neck. On the right distal dorsal 5th finger, there was a hemorrhagic bulla with prominent erythema accompanied by a linear erythematous streak extending proximally (Figure 1 A-C). She had painful enlarged lymph nodes in her right submandibular and

axillary regions. The patient was treated empirically with oral clindamycin and azithromycin for possible bacterial infection, resulting in only partial clinical response. There was significant reduction in erythema and pain, but persistent itch and burning.

Figure 1.
(A) On physical exam there was a very painful, ulcerated pink plaque with serosanguinous crust and surrounding erythema and peripheral pustules on the right anterior neck.



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(B) On the right distal dorsal 5th finger, there was a hemorrhagic bulla with prominent erythema.

(C) Accompanied by a linear erythematous streak extending proximally.



CBC, CMP, and ESR were unremarkable. Chest x-ray was negative. Bacterial culture from the finger lesion was positive for 3+ MSSA and non-hemolytic Streptococcus. Viral PCR from finger lesion was positive for HSV1. Bartonella serology was negative. The patient subsequently responded very well to oral valacyclovir with complete resolution.

Lymphangitis is inflammation along the lymphatic channels that occurs as a result of infection at a distal site, most commonly observed in the setting of acute bacterial infections such as *Group A Beta-Hemolytic Streptococcus*, *Staphylococcus*

aureus, *Pseudomonas*, and *Pasteurella multocoda*. Consequently, the presence of lymphangitic streaking often results in treatment with systemic antibiotics. However, superficial lymphangitis may also occur secondary to nonbacterial etiologies including viral or fungal infections, arthropod bites, or iatrogenic interventions.¹ Although the natural history of herpes simplex lymphangitis is self-resolution, antiviral therapy may shorten the duration of symptoms and help prevent recurrence.² Our patient demonstrates a unique case of cutaneous herpes simplex infection with centrifugal spread complicated by lymphangitis and regional lymphadenopathy. Awareness of nonbacterial causes of lymphangitis will help prevent misdiagnosis, unnecessary antibiotic use, and the delay of appropriate treatment.

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