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Pediatric Viscerocutaneous Loxoscelism: A Web of Clinical Challenges

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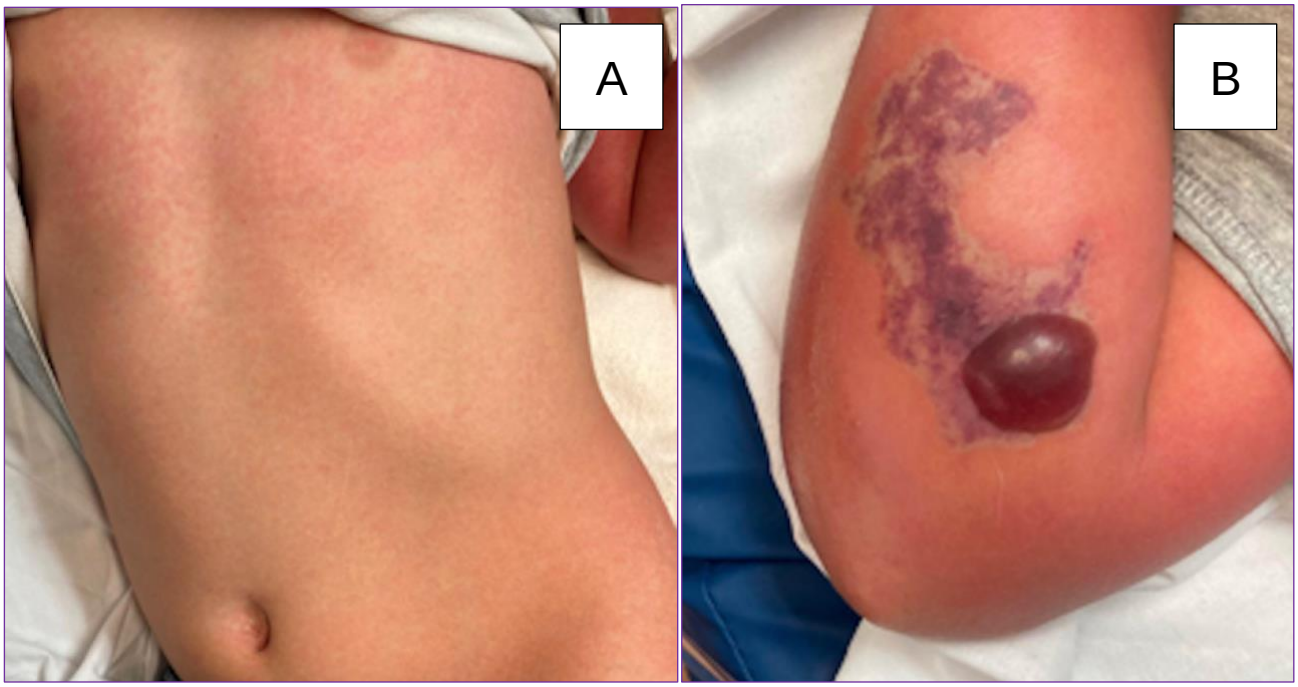

Figure 1. (A) Diffuse morbilliform eruption of coalescent macules and papules most prominent on bilateral arms but extending diffusely over the trunk and bilateral upper and lower extremities, and palms and soles with some follicular accentuation. The face was spared.
(B) A large hemorrhagic blister on the right upper arm within a large slightly, depressed plaque containing numerous purpuric macules.

INTRODUCTION

This is a 10-year-old boy with no notable past medical history admitted for a suspected brown recluse spider bite with diffuse morbilliform rash and transaminitis found to be viscerocutaneous Loxoscelism. Physical exam was typical for viscerocutaneous Loxoscelism cases with a diffuse morbilliform eruption of coalescent macules and papules most prominent on bilateral arms but extending diffusely over the trunk and bilateral upper and lower extremities, and palms and soles (**Figure 1A**). Some follicular accentuation of the rash was noted. The face was spared. Additionally, there was a large hemorrhagic blister on the right upper arm

within a large slightly, depressed plaque containing numerous purpuric macules (**Figure 1B**). Laboratory work-up was notable for elevated aspartate transaminase and alanine transaminase, as well as leukocytosis with mild eosinophilia. Over the following days, the patient's clinical condition and laboratory findings improved, and the patient was discharged with topical triamcinolone cream for symptomatic treatment of the morbilliform eruption but did not require systemic therapy for Loxoscelism.

Brown recluse spiders belong to the arachnid genus Loxosceles. The most common member of this genus is the brown recluse spider (BRS), or Loxosceles reclusa. Their range is comprised of the South, Southwest, and Midwestern United States extending from Nebraska to Ohio and Texas to Florida.[1] Their bite can cause skin necrosis and other systemic manifestations such as acute hemolytic anemia, renal failure, and death.[1] Commonly they are found in individuals' homes, particularly in closets, attics, and basements, and bites occur secondary to the spider being crushed while a patient dresses or rolls onto the spider while sleeping. Typical bite sites include the upper arm and inner thigh.[1,2]

Loxoscelism encompasses the clinical manifestations that result from the bite of a spider from the genus Loxosceles. Systemic complications - or "viscerocutaneous" Loxoscelism - are observed in less than 1% of BRS bites[3]. Most often these systemic manifestations, such as fever, chills, nausea, and morbilliform rash, are observed in children, the elderly, and immunocompromised patients. Systemic Loxoscelism can occur in up to 16% of pediatric patients.[2] Few cases have been reported on pediatric Loxoscelism. A case report by Gunasekaran and colleagues followed a 14-year-old boy who developed Loxoscelism after a known BRS bite.[4] Their findings were similar in terms of physical exam and clinical course; however, their patient was found to have a delayed hemolysis reaction.

Because Loxoscelism is a diagnosis of exclusion without a diagnostic test, and many patients present days after a suspected bite occurs, having a high index of suspicion for Loxoscelism may prevent morbidity and mortality that can occur with viscerocutaneous loxoscelism. This is especially crucial in the vulnerable pediatric population, in which systemic manifestations are more common and failure to recognize and treat Loxoscelism can result in death.

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