Clinical and Ancillary Data in Children with Brown Recluse Spider Envenomation

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Loxosceles spider envenomations can result in both local and systemic findings with significant morbidity and occasionally mortality. Previous data regarding envenomations is largely based on case reports. Our research was designed to present the largest case series to date of brown recluse spider (BRS) envenomation in children.

BACKGROUND

Loxoscelism is a form of necrotic arachnidism found throughout the world with a predilection for North and South America. [1] L. reclusa can usually be found in South-Central U.S. particularly in Missouri, Kansas, Oklahoma, Arkansas, Tennessee and Kentucky. [2] According to prior case studies, the majority of victims do not see the spider at the time of bite and are unaware of the envenomation until a wound develops. [3] This characteristic was supported by our research as well.

METHODS

A retrospective chart review of patients hospitalized at Children’s Mercy Hospital for brown recluse spider envenomation between 2003 and 2007. Only cases confirmed by a medical toxicologist were included.

RESULTS

64 children with brown recluse envenomations were identified
32 males, mean age 9.1 yrs (7mo- 18yrs), 31 Caucasian, 27 AA
Bite location was most commonly on the leg (24) and arm (15)
Patients presented 1-10 days (mean 3.3, median 2.5) after the bite

The majority of patients (84%) did not see the spider

Hemolysis (39 patients) occurred from 1-12 days post-bite (mean 4.6 days)

- Hemoglobin nadir in those with hemolysis ranged from 4.6-12.9 grams (mean 9.1 grams)
- Hemoglobin nadir occurred on day 2-12 (mean 6.6 days)

Sodium was lower in patients who hemolyzed (p=0.044) but did not correlate with the day of hemolysis

Four patients developed acute renal failure (creatinine range 1.1-4.5 mg/dL)

No deaths occurred

REFERENCES