Emergency Department Clinical Guidelines

Management Guidelines Emergency Department Princess Margaret Hospital for Children Perth, Western Australia Last reviewed January 2011 Dr Helen Mead Page 1 of 2

Spider Bites

1. **RED-BACK SPIDER** (Latrodectus hasselti)

This spider is found throughout Australia, and bites occur throughout the year, most frequently during the warmer months. Only bites by the female are of clinical importance. Many cases are mild or unrecognised. In general, young children (less than 2 years) should be observed for a period; it is reasonable not to admit older children if they are asymptomatic, but warn parents that they may need to return if symptoms develop.

Local symptoms may occur within minutes of the bite, with systemic symptoms evolving over 2 to 4 hours.

Local: - initially often a mild sting, progressing to severe pain around the bite site

- localised sweating around the bite site

Regional: - pain and swelling of regional lymph nodes

- myalgia distal to the bite

Systemic: - headache

nausea and vomiting abdominal pain

pyrexia

- generalised sweating

tachycardia and hypertension
muscle weakness or tremour

Management

a) First Aid: - a cold compress may offer some relief

-a pressure immobilisation bandage is not recommended and may

increase pain

b) General measures: - appropriate analgesia

- observations, including blood pressure

c) Antivenom:

Indications

Severe pain or systemic symptoms likely to be a result of bite by redback spider. About 25% of cases will require antivenom. Antivenom may still be effective up to several days after a bite. Close relatives of the redback spider may produce a milder form of latrodectism and have appeared to respond to redback spider antivenom.

Type

CSL Red-back Spider Antivenom is equine antibody fragments, 500 units in 1-1.5 mL ampoule

Administration

Observations including BP should be done at baseline, 15 mins, 30 mins then hourly for 2 hours Premedication is not required.

The optimal route for antivenom has not been determined.

Initially, give 2 ampoules of undiluted antivenom IM

If envenomation is severe or response to IM antivenom is incomplete after 2 hours, give 2 ampoules of antivenom IV, diluted in 100 mL Normal Saline over **20-30 minutes**. The dose of antivenom is not dependent on the age or weight of the child.

If no improvement has occurred within 2 hours, and the diagnosis is certain, repeat the dose of antivenom.

(If in doubt, seek advice from the Duty Toxicologist at Poisons Information Centre phone 131126)

d) Reactions to antivenom:

Although acute hypersensitivity reactions are rare (approximately 2% after IM antivenom in one study, < 5% after IV antivenom in another study), appropriate equipment, medications and personnel should be available to manage an allergic reaction. **See Anaphylaxis Guideline**

- The risk of acute or delayed allergic reaction is greater in patients with equine allergy or previously treated with equine immunoglobulin
- The incidence of delayed reaction is low (1.4% in one series after IM antivenom, 10% in a small series after IV antivenom) and corticosteroid prophylaxis is not routinely recommended. Patients should be informed to present for a short course of oral steroids if classic symptoms of serum sickness occur (joint pain and rash)

2. FUNNEL-WEB SPIDERS

No species are found in WA.

3. OTHER SPIDER BITES AND <u>NECROTISING ARACHNIDISM</u>

Many spider bites may be associated with local irritation and inflammation and symptomatic treatment with analgesics and antihistamines for itch is generally all that is required. The white-tailed spider (*Lampona cylindrata*) was long implicated in medical literature and media reports as causing skin necrosis and ulceration. Spider bite in Australia is an extremely uncommon cause of ulceration and should only be considered at the end of a long list of other differential diagnoses including infections and vasculitis. Prospective studies have failed to support the association between Australian spiders and such lesions. Even if a skin ulcer is thought to have been the result of a spider bite, treatment is symptomatic with analgesia, elevation and good wound care. Rarely, the input of a plastic surgeon may be required for wound debridement and skin grafting.