# Princess Margaret Hospital for Children Emergency Department Guideline

PAEDIATRIC ACUTE CARE GUIDELINE			
Spider Bite			
Scope (Staff):	All Emergency Department Clinicians		
Scope (Area):	Emergency Department		

This document should be read in conjunction with this DISCLAIMER <a href="http://kidshealthwa.com/about/disclaimer/">http://kidshealthwa.com/about/disclaimer/</a>

## **Spider Bite**

## **Red-Back Spider (Latrodectus hasselti)**

- This non-life threatening envenomation (latrodectism) classically presents with a triad of localized pain, sweating and piloerection (goosebumps)
- Clinically the main issue is pain, which may be difficult to manage and can last up to 1 week
- The efficacy of redback spider antivenom has recently been questioned and may not provide any additional pain relief over using analgesia alone

### **Signs and Symptoms**

 Consider the diagnosis in any child with abrupt onset of inconsolable crying, abdominal pain or priapism

#### Local

- Initially asymptomatic or mild sting +/- erythema, progressing to severe pain around the bite site
- · Localised sweating and piloerection
- Pain and swelling of regional lymph nodes

#### Systemic (minority)

- Headache
- Nausea, vomiting and abdominal pain
- Lethargy and malaise
- Regional or generalised pain and sweating. Often fluctuating
- Mild tachycardia and hypertension

#### **Management**

#### First Aid

- · A cold compress may offer some relief
- A pressure immobilisation bandage is **not** recommended and may increase pain

#### **Analgesia**

- Simple analgesia such as paracetamol or ibuprofen
- Opiates such as intranasal fentanyl or oxycodone po may be required
- **Note:** the aim is for a reduction in pain to acceptable levels, not a pain free state. Only 25% of patients have a reduction in pain 2 hours post bite and 50% at 24 hours.

#### **Antivenom**

- Redback spider antivenom was historically given in cases of severe pain and systemic symptoms; however a recent RCT (RAVE II) has brought its effectiveness into question
- All cases of redback spider envenomation should be discussed with a senior ED doctor and consider seeking input by the Duty Toxicologist at Poisons Information: 131126

#### **Administration**

- In a monitored area with facilities to treat anaphylaxis readily available
- Observations including BP should be done at baseline, 15 mins, 30 mins then hourly for 2 hours
- Give 2 ampoules diluted in 10mL/kg (max 100mL) of 0.9% saline IV over 20 minutes

#### Note

- Dose of antivenom is not dependent on the age or weight of the child
- The IV route is a safe and well-established practice despite the product information stating it is given via the IM route

#### **Adverse Reactions**

- Hypersensitivity reactions (<5%) are usually limited to a rash. Anaphylaxis is rare and should be managed by stopping the infusion and standard therapies refer to <a href="Anaphylaxis">Anaphylaxis</a>
- Serum sickness (< 10%) occurs 5-10 days post antivenom administration and presents with fever, rash, joint pains and myalgia. It responds well to 5 days of oral prednisolone.

## **Funnel-web Spiders**

• No species are found in Western Australia

## Other Spider Bites and "Necrotising Arachnidism"

- 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.

#### References

- 1. Isbister GK et al. A randomised controlled trial of intramuscular versus intravenous antivenom for latrodectism the RAVE study. Quarterly Journal of Medicine 2008; 101:557-565
- 2. Isbister GK et al. Randomised controlled trial of intravenous antivenom versus placebo for lactrodectism: the second redback antivenom evaulation (RAVE II) study. Annals of Emergency Medicine 2014; 64:1-9.
- 3. Isbister GK, Gary MR. White-tailed spider: a prospective series of 130 definite bites by the *Lampona species*. Medical Journal of Australia 2003; 179:199-202
- 4. Murray L, Little M, Pascu O and Hoggett K. Toxicology Handbook. 3<sup>rd</sup> Edition. Chatswood, NSW: Elsevier Australia; 2015.

This document can be made available in alternative formats on request for a person with a disability.

File Path:				
Document Owner:	Dr Meredith Borland HoD, PMH Emergency Department			
Reviewer / Team:	Kids Health WA Guidelines Team			
Date First Issued:	30 July, 2015	Version:		
Last Reviewed:	30 July, 2015	Review Date:	30 July, 2017	
Approved by:	Dr Meredith Borland	Date:	30 July, 2015	
Endorsed by:	Medical Advisory Committee	Date:	30 July, 2015	
Standards Applicable:	NSQHS Standards:    ©   ©			

Printed or personally saved electronic copies of this document are considered uncontrolled