



AUSTRALIAN RESUSCITATION COUNCIL

GUIDELINE 9.4.2

ENVENOMATION - SPIDER BITE

INTRODUCTION

The bites of many different Australian spiders may cause pain but only bites from some Funnel-web spiders are an immediate threat to life.

If serious symptoms or signs develop from any spider bite, transport the victim to hospital.

FUNNEL-WEB SPIDERS

A bite from a large (> 2cm), dark-coloured spider, especially in the regions of Sydney, Blue Mountains, central, northern, southern highlands or south coast of NSW, or south-eastern Queensland, should be considered as a dangerous bite and immediate treatment given^{1,2}.

RECOGNITION

Symptoms and signs of Funnel Web spider bite may include:

- pain at the bite site, but little local reaction
- tingling around the mouth
- profuse sweating
- copious secretion of saliva
- abdominal pain
- muscular twitching
- breathing difficulty.
- confusion leading to unconsciousness

Note:

Life threatening effects may occur within 10 minutes.

MANAGEMENT

The rescuer should:

- call an ambulance
- apply Pressure Immobilisation Technique immediately (see Guideline 9.4.8)

If the victim is unresponsive and not breathing normally, follow Australian Resuscitation Council and New Zealand Resuscitation Council Basic Life Support Flowchart (ARC Guideline 8).

Note:

Antivenom is available for treatment of Funnel-web spider envenomation.

[CLASS A, LOE IV]

RED-BACK SPIDER

This spider (approximately 1cm body length) has a characteristic red, orange or pale stripe on its back. A bite may threaten the life of a child, but apart from pain, is rarely serious for an adult¹.

RECOGNITION

Symptoms and signs may include:

- immediate pain at the bite site which becomes hot, red and swollen
- intense local pain which increases and spreads
- nausea, vomiting and abdominal pain
- profuse sweating, especially at the bite site
- swollen tender glands in the groin or armpit of the envenomated limb.

Notes:

Local pain develops rapidly at the bite site and may become widespread, but the venom acts slowly so a serious illness is unlikely in less than 3 hours. Pain can be treated with antivenom^{3,4,8} (Class A, LOE II) in a hospital where resuscitation facilities are available. A related species, the Cupboard Spider (resembles the red-back spider without the stripe) may be treated with the Red-back spider antivenom^{1,5}.(Class B, LOE IV)

MANAGEMENT

The rescuer should:

- keep the victim under constant observation
- apply an ice or cold compress to lessen the pain (for periods of no longer than 20mins)
- transport the victim to a medical facility, preferably by ambulance, if the victim is a young child or collapse occurs or pain is severe.

Note:

The Pressure Immobilisation Technique is **not** used because the venom acts slowly and any attempt to retard its movement tends to increase local pain. Antivenom is available for Red-back spider envenomation.

[CLASS A, LOE IV]

WHITE-TAILED SPIDER BITE

Although the bite of the White-tailed spider may cause severe inflammation⁴, it has caused, contrary to popular opinion, very few cases of severe local tissue destruction.^{1,6} Other causes of necrotic ulcers should be sought especially when a spider has not been seen.⁷

The Pressure Immobilisation Technique should **not** be used.

[CLASS A; Expert Consensus Opinion]

OTHER AUSTRALIAN SPIDER BITES

All other spider bites should be treated symptomatically (Apply ice or cold compress to lessen the pain.)

[CLASS A; Expert Consensus Opinion]

REFERENCES

1. Sutherland SK, Tibballs J. Australian Animal Toxins, Oxford University Press, Melbourne. 2001
2. Isbister GK, Gray MR, Balit CR et al. Funnel-web spider bite: a systematic review of recorded clinical cases. Med J Aust 2005; 182: 407-11.
3. Ellis RM, Sprivulis PC, Jelinek GA, et al. A double-blind, randomized trial of intravenous versus intramuscular antivenom for Red-back spider envenoming. Emerg Med Aus 2005; 17: 152-156.4.
4. Isbister GK, Brown SGA, Miller M. et al. A randomised controlled trial of intramuscular vs. intravenous antivenom for lactrodoctism- the RAVE study. Q J Med 2008; 101: 557-565.
5. Isbister GK, Gray MR. Effects of envenoming by comb-footed spiders of the genera *Steatoda* and *Achaearanea* (family Theridiidae: Araneae) in Australia. J Toxicol – Clin Toxicol 2003; 41: 809-819.
6. Isbister GK, Gray MR. White-tail spider bite: a prospective study of 130 definite bites by *Lampona* species. MJA 2003;179: 199-203
7. Pincus SJ, Winkel KD, Hawdon GM, Sutherland SK. Acute and recurrent skin ulceration after spider bite. Med J Aust 1999; 171: 99-102.
8. Isbister GK, Page CB, Buckley NA, et al. Randomized Controlled Trial of Intravenous Antivenom Versus Placebo for Latrodoctism: The Second Redback Antivenom Evaluation (RAVE-II) Study. Annals of Emergency Medicine 2014; in press.

FURTHER READING

ARC Guideline 8 Cardiopulmonary Resuscitation

ARC Guideline 9.4.8 Envenomation - Pressure Immobilisation Technique