

STATE TOXINOLOGY SERVICES

Toxinology Dept., Women's & Children's Hospital, North Adelaide SA 5006 AUSTRALIA

PROTOCOL FOR MANAGING A BITE BY *Crotalus adamanteus*

MANAGING LOCAL TISSUE INJURY

- Beware fluid shifts and secondary shock
- Avoid debridement of damaged tissue until any coagulopathy is resolved
- If compartment syndrome is suspected, confirm with direct pressure measurement & treat conservatively with mannitol
- Fasciotomy should only be used as a last resort and only after any coagulopathy is resolved
- Ensure tetanus prophylaxis
- Use antibiotics only for confirmed infection

Victim is bitten

EMERGENCY MEASURES

- Secure snake to prevent escape or further bites
- Apply First Aid
- Call for ambulance
- Notify hospital

AMBULANCE TRANSPORT

- Bring with victim
- Medical Management summary for this snake
- Personal medical summary for this victim

ASSESSMENT AT HOSPITAL

EMERGENCY MEASURES

- Triage as top priority
- Insert IV line in upper limb opposite to bite site side
- Commence IV fluids 300ml/hr
- Take blood for tests
- Examine for local swelling, blistering, oozing of blood, shock, bleeding, ptosis

Is there significant local swelling or blistering?
Is there developing shock, bleeding, ptosis?

NO

YES

Observe closely in ICU, check frequently on extent of local reaction, cardiovascular status and look for developing shock, systemic bleeding, thrombocytopenia, ptosis

Victim develops progressive local swelling, shock, bleeding or thrombocytopenia, ptosis

NO

YES

Give more antivenom
Continue to monitor closely

Commence IV antivenom therapy as soon as available

Monitor for signs of shock, paralysis, bleeding
Repeat blood tests at 2 & 5 hrs after 1st set
Monitor fluid input & output closely
Beware hypovolaemic shock

Local swelling increases significantly OR
Develops shock, bleeding, thrombocytopenia
OR Develops ptosis, progressive paralysis

YES

NO

FIRST AID

- Victim should lie down
- Immobilise the bitten limb with a splint
- Keep victim still
- Call for ambulance
- Notify local hospital
- Request hospital notify Prof. White and RAH ICU to organise retrieval
- Support breathing if imperilled
- Do not allow victim to eat or drink

LABORATORY TESTS

- electrolytes
- renal function
- complete blood picture
- CK
- INR, aPTT, d-dimer

ANTIVENOM DETAILS

- Protherics CroFab or Bioclon Antivipmyn
- Initial dose 10-12+ vials IV
- Dilute in normal saline
- Have adrenaline ready
- Have recuss equip. ready
- Start slow, increase rate if no reaction