Toxicity / Risk Assessment

- Patients with no bite mark or no symptoms may be envenomed
- All envenomed patients should be admitted for at least 24 hours of monitoring / repeat examination and investigations
- Snake handlers are managed as per standard guidelines

Clinical features of envenoming:

- Patients may be envenomed, but remain asymptomatic
- Early collapse (Brown snake), cardiac arrest
- Non-specific: headache, nausea, vomiting, abdominal pain
- Venom Induced Consumptive Coagulopathy (VICC):
  bleeding from bite site, venipuncture, gums, epistaxis, ICH (D-dimer >10x ULN, INR > 1.3, ↓ fibrinogen)
- TMA (Thrombotic Micro Angiopathy) is associated with VICC: renal impairment, ↓ Hb, ↓ platelet
- Neurotoxicity: ptosis, diplopia/ophthalmoplegia, respiratory or distal limb paralysis, seizures
- Myotoxicity: local pain (Black snake), rhabdomyolysis, myoglobinuria (can be delayed)

TREAT AS ENVENOMED IF THERE IS:

1. CLINICAL EVIDENCE
   - Hx of collapse / unconsciousness / seizure / cardiac arrest
   - Neurotoxic paralysis (ptosis, ophthalmologist, limb weakness, respiratory muscle weakness)
   OR
2. LABORATORY EVIDENCE
   - Coagulopathy (INR >1.3, blood not clotting bleeding from venepuncture sites / wounds)

POSSIBLE EVIDENCE OF ENVENOMATION (DISCUSS WITH A CLINICAL TOXICOLOGIST)

- Significant symptoms (ongoing headache / vomiting)
- Patient systemically unwell
- Any abnormal INR, APTT, fibrinogen, D-dimer, CK > 1000 IU/L, FBC (leucocytosis)

- RESUSCITATE
  - Discuss with a clinical toxicologist
  - Place 1 vial of Tiger snake AV and 1 vial of Brown snake AV together in 100-500 mL of 0.9% normal saline and infuse over 15-30 minutes in a critical care area with monitoring

- Remove pressure bandage after AV has been administered
  - Monitor and treat any complications (e.g occult haemorrhage, renal failure, electrolyte abnormality)

- Repeat bloods 6 and 12 hours post AV (FBC including film, U+E's, coagulation profile, D-dimer)
  - Coagulopathy is unlikely to start to resolve within first 12 hours post bite
  - Continued coagulopathy IS NOT an indication for more AV

CRITERIA FOR DISCHARGE:

- VICC resolving AND any myotoxicity / neurotoxicity mild and resolving
- Warn of risk of serum sickness 4-14 days post AV (fever, arthralgia, myalgia, rash)
- Serum sickness can be treated with 50 mg oral prednisolone daily for 5 days