Antivenom (AV)-Polyvalent Snake Antivenom / (PSAV)



Polyvalent antivenom is used for treatment of snake envenoming in cases where two monovalent antivenoms will not cover all possible species

Indications

Choice of AV should be discussed with a clinical toxicologist

Clinical and/or laboratory evidence of envenoming where more than two monovalent antivenoms are required to cover possible species (for example in Victoria, only brown and tiger snake antivenoms are required for treatment of envenoming caused by an indigenous snake bite, whereas non-indigenous snake envenomation ie. Taipan, Death adder and Mulga will require polyvalent AV) OR where appropriate monovalent AV is not immediately available

Contraindications: Nil absolute

Adverse effects:

Anaphylaxis

Cease AV immediately, give oxygen and rapid IV fluid 1L (20mL/kg in children) if hypotensive. Give IM adrenaline 0.01 mg/kg (max 0.5 mg)

Severe anaphylaxis may require adrenaline infusion-titrate to response

Restart AV if symptoms resolved (discuss with Clinical Toxicologist)

Serum sickness

May occur 4-14 days after AV

Fever, rash, myalgias, arthralgias – usually self-limiting

Prednisolone: 25 mg (1mg/kg up to 25 mg in children) daily for 5 days to ameliorate symptoms

Presentation

1 vial contains 3000 units Tiger Snake AV, 1000 units Brown Snake AV, 6000 units
 Death Adder AV, 12000 units Taipan AV, 18000 units Black Snake AV

Dose and Administration

- Patient needs to be in a monitored area equipped for management of potential anaphylaxis
- Dilute 1 vial of PSAV in 500 mL normal saline (1:10 dilution) and administer IV over 30 minutes NB: Can be given as a rapid push in the event of cardiac arrest
- Patients at risk of fluid overload (e.g. children): dilute 1:5
- Any pressure bandage should be released towards the end of the infusion of antivenom
- Doses of PSAV are the same for both adults and children
- Premedication is not recommended

Therapeutic Endpoint:

- The overwhelming majority of patients only require 1 vial to neutralize all circulating venom
- VICC resolves within 24-36 h and further doses of antivenom **do not** influence the time course

Pregnancy:

- No contraindication