

**New safe and
cost effective treatment
for snake bite**

SNAKE VENOM ANTISERUM I.P.

**Snake bite - An acute life threatening time limiting
medical emergency**

Unfortunately India has the highest number of deaths due to snake bites in the world with 35,000 to 50,000 people dying per year according to WHO direct estimates



**Geographical variation in color within
same snake species is commonly seen**

Polyvalent Snake Venom Antiserum is effective against bites caused by Indian Cobra (Naja naja), Common Krait (Bungarus caeruleus), Russell's Viper (Vipera russellii) and Saw-Scaled Viper (Echis carinatus)



**Basic raw material is produced at India's only
WHO-GMP approved equine farm and plasma fractionation facility**

**Finished product is produced at a state of the art
WHO-GMP approved manufacturing facility**

Syndromic Approach to Diagnosis

NEUROTOXIC SYNDROME		HAEMOTOXIC SYNDROME
Indian Cobra bite Local Envenoming Present	Common Krait bite Local Envenoming absent	Russell's Viper bite OR Saw Scaled Viper bite Local Envenoming Present
Local necrosis and blistering	Minimal or no swelling	Local pain, swelling and erythema at the bite site.
Rapidly progressive descending paralysis	Often presents early morning with paralysis	Tender & enlarged lymph nodes draining the bitten part
Ptosis, diplopia or ophthalmoplegia	H/O sleeping on floor bed	Local necrosis and/or blistering
Paralysis of jaw and tongue	Abdominal pain	Nausea, vomiting, abdominal pain and abdominal tenderness
Bulbar paralysis and respiratory failure	Neuroparalysis	Low back ache or loin pain which suggest of the likelihood of developing renal failure
Hypoxia, altered sensorium and coma.	Ptosis ,Bulbar paralysis & respiratory failure	Passage of reddish or dark brown colored urine or a reduction in the amount of urine output
Intercostal muscle paralysis		Hemoptysis, epistaxis,hematuria,hematemesis and melena, chemosis, macular bleed, bleeding from the bite site or cannula, bleeding into the muscles, gingival bleed, bleeding into the skin and mucous membranes showing as purpura or petechia.
Respiratory paralysis		An abnormal WBCT and PT / APTT above 1.5 times normal, DIC and shock
		Neurological manifestations have been reported in Russell's viper bites from some parts of India.

Dosage:

Refer to pack insert

Administration:

Polyvalent Snake Venom Antiserum is administered by slow intravenous infusion after dilution with Normal /glucose saline at a rate of 5-10 ml/kg body weight per hour. Requirement of further dosing after one hour of Antiserum administration depends on: Extent of reversal of coagulopathy in haemorrhagic bite or Persistence of symptoms or no signs of reversal of paralysis / respiratory failure in neurotoxic bite.

Children should receive the same dose as adults

For handling hypersensitivity reactions, Inj. Adrenaline should be always kept handy, before starting the dose of Snake Venom Antiserum.

Any delay in administration may result in increased dose requirement and decreased effectiveness.

Presentation & Reconstitution:

Lyophilized Polyvalent Snake Venom Antiserum is supplied in 10 ml glass vials along with Sterile Water for Injection I.P. 10ml for the purpose of reconstitution. For reconstitution, withdraw diluent in 10 ml sterile syringe and insert needle through vial stopper and inject in the powder. Mix the contents gently by swirling action and avoid vigorous shaking. Serum should be used as soon as possible after reconstitution.

Liquid Snake Venom Antiserum I.P. is supplied in 10 ml glass vials.

1 ml of Snake Venom Antiserum neutralizes not less than 0.6 mg. of the Indian Cobra venom, 0.45 mg. of Common Krait venom, 0.6 mg. of Russell's Viper venom and 0.45 mg. of the Saw-Scaled Viper venom.



STORAGE:
Lyophilized Snake Venom Antiserum is stable at room temperature and does not require special storage facilities. Ideally, it should be stored in a cool (<+30°C) place and do not expose to excessive heat. Liquid Snake Venom Antiserum I.P. should be stored at +2 to +8°C. Do not freeze and keep protected from heat.

SHELF LIFE:
Lyophilised - Four years.
Liquid - Two years.

