SCORPION VENOM ANTISERUM IHS

Purified Polyvalent, Enzyme refined, Equine Antiserum Immunoglobulin Fragments (1mL LYOPHILIZED)

Description

Polyvalent scorpion venom antiserum is prepared from the purified plasma of healthy equines, which have been immunized against venom of Leiurus and Androctonous species. The antivenin is purified by pepsin digestion, controlled heating and precipitation by caprylic acid ultra filtration followed by sterile filtration.

Composition:

Upon reconstitution with 1 mL Sterilised water for injection, each mL neutralizes not less than Leiurus quinquestraitus 50LD_{sn} venom

Androctonus amoreuxi 35LD₅₀ venom

Paraspecifically

Androctonus crassicauda Androctonus aeneas Androctonus australis Scorpiomarus palmatus Buthus Occitanus

Preservative: Cresol BP ≤ 0.25 v/v Excipients : Sodium chloride BP Stabilizers: Glycine BP

Pharmacodynamic/Pharmacokinetics

Not applicable.

Pregnancy

Pregnancy is not a contraindication to the use of Scorpion venom antiserum unless clearly indicated.

Lactation

Breast feeding is not a contraindication to Scorpion venom antiserum unless clearly indicated. It is not known if antivenom antibodies are excreted into breast milk.

Clinical Pharmacology:

Venom from a single scorpion may contain several neurotoxins such as histamine, serotonin and enzymes. The most important clinical effects of envenomation are neuromuscular, neuro-autonomic or local tissue effects.

Grades of Clinical Picture Severity:

Grade 0: No local or systemic signs.

Grade I: Local signs, pain and/or parathesia at the site of sting Grade II: Local signs and pain + remote pain and or parathesia Grade III: Local pain + cranial, autonomic or somatic neuromuscular dysfunction.

Indications:

Treatment of envenomation from the stings of the previously mentioned scorpion species.

Dosage and Administration:

The product is given by intramuscular, subcutaneous or intravenous injection.

The dose is not related to the age or body weight. A skin test must be done before giving anti-scorpion venom serum (See under precautions).

Case	Dose	Mode of Administration
Grade 0	No treatment	_
Grade I or II	1 – 2 vials	I.M. or S.C.
Grade III	5 vials diluted with	I.V. drip over 30

NB

In grades I, II and III the dose may be repeated after 1-2 hours if improvement has not occurred.

The dose should be increased if the interval between the sting and the treatment is prolonged or the site of the sting is on the head, neck or shoulders.

Place ice on the sting site and immobilize the stung limb to reduce pain and venom extension.

Reconstitution of the Lyophilized Antiserum:

Remove the flip off in the seal over the diapharagms of the vials of antivenin and diluents. Disinfect the rubber diapharagm with alcohol. Withdraw the diluent in a sterile syringe. Insert the needle through the stopper of the vial containing anti venom and point the diluent jet to the center of lyophilized pellet of antivenom to the dissolved in order to prevent floating. Swirl the vial gently for one to three minutes and do not shake to avoid foaming.

Adverse Effects

Anaphylaxis to equine serum may occur in some rare cases with hypotension, dyspnea, urticaria and shock. Adrenaline injection (1:1000), antihistamine and corticosteroids should be readily available.

Serum sickness may occur 7-10 days after injection of the antitoxin serum including fever, vomiting, diarrhea, joint and muscle pains, lymphadenopathy, bronchospasm and urticaria. Nephritis, myocarditis, neuritis, polyarthritis and uveitis have been reported as rare complications of serum sickness. It is treated with antihistamine and corticosteroids.

Contraindications:

Allergy to equine serum

Use with caution in allergic cases such as asthma or infantile eczema.

Precautions:

Intradermal skin test should be done before giving antiscorpion venom serum:

Inject 0.1-0.2 mL of (1:10 dilution) antivenom intradermally.

In case of past history of allergy (1:100) dilution should be used. Positive skin test is in the form of a weal with or without surrounding erythema within 30 minutes.

Some studies showed that using low dose of subcutaneous epinephrine or parallel infusion of hydrocortisone and antihistamine can reduce adverse reactions, which may occur with the antivenom.

There are drug interactions with the antiscorpion serum. The antivenom should not be used if turbid, expired or showing precipitation which may cause drug reactions.

Overdose and treatment:

The dose is usually dependent on the severity of the envenomation. A symptomatic treatment should be given in case of overdose and supportive therapies are recommended.

Shelf Life:

Five years from the date of manufacturing for the lyophilized form

Storage:

The freeze dried vials should be stored between 2-8°C. Reconstituted liquid shall be used immediately.

Drocontation

Scorpion Venom Antiserum Polyvalent is supplied as freeze dried powder in a glass vial along with 1mL sterilised water for injection.

Disposal:

Left over antivenom and used empty vials should be discarded as a biomedical waste.

