

Post exposure management: Snake and scorpion bites

BACKGROUND

The geographical location of the Kingdom of Saudi Arabia makes it unique in that it harbors many snake and scorpion species of the world. There is a known presence of poisonous snakes and scorpions in the Saudi Arabia. Scorpion bites are more common than snake bites as scorpions are found everywhere in Saudi Arabia. Although not all snakes and scorpions are venomous, snake and scorpion bites should be treated as potential medical emergencies and must receive immediate assessment and treatment.

SCOPE

This protocol is a component of the Occupational Health Management System and post exposure management as outlined in the Occupational Health Policy. Snakebites are environmental and occupational hazards. Preventative measures and predeparture education on basic post exposure management of encounters with snakes and scorpions is necessary for those performing research in remote areas of Saudi Arabia.

GUIDANCE

Preventative measures that can reduce the risk of exposure when performing research outdoors should be implemented. Wearing appropriate personal protective equipment and protective clothing such as snake-proof boots, leather gloves, and long pants will reduce the risk of exposure. Planning around the time year when research will take place can reduce the risk of encounters; the possibility of encountering venomous snakes and scorpions is greater during the hottest months of the year. Prior engaging in remote research work, identification of a hospital closest to the research site and one that can support the recommended post exposure management should be identified. As identified by all Government hospitals located in Saudi Arabia are mandated to have snake antivenom on hand.

Signs and symptoms of a snake bite

The signs and symptoms that develop from venomous snakebites may vary in severity based on the type and amount of venom injected. A snake bite is not always apparent and bite marks might not be evident on the skin of a person. It should be noted that a snake bite is not always followed by death. Venomous bites might include symptoms of local swelling and bleeding at the site, headache, vomiting, drowsiness, and loss of consciousness.

Post exposure management of snake bites

- Call for emergency medical assistance (Dial 997 in Kingdom); otherwise, victims should be transported to a hospital without delay.
- Keep the bitten person still and calm.
- Wash the bite area with soap and water immediately.
- Keep the affected area below the heart level to reduce the flow of venom.
- Cover the bite with clean gauze.
- Avoid touching applying tourniquet or tourniquets or pressing the affected area.
- Avoid injuring the affected area or sucking poison from it.

- Avoid applying ice or soaking the wound in water.
- Avoid drinking caffeinated beverages.
- Take a picture of the snake for identification if it is possible to do so safely.
- Make a mark every 15 minutes at the leading margins of the pain and swelling and note the time. This assists in determining how fast the venom is spreading.
- If venom is spat into a person's eyes, flush out the eye using water.

Signs and symptoms of a scorpion bite

Symptoms of a scorpion sting may include:

- Stinging or burning sensation at the injection site
- Restlessness
- Convulsions
- Staggering gait
- Slurred speech
- Drooling
- Muscle twitches
- Abdominal pain and cramps
- Respiratory depression

These symptoms may last for up to 48 hours (about 2 days). Stings from a scorpion can be life-threatening and be managed immediately.

Management of scorpion bites

- Call for emergency medical assistance (Dial 997 in Kingdom); otherwise, victims should be transported to a hospital without delay.
- If available, apply ice packs to the affected area and avoid soaking it in cold water.
- Keep the victim still and calm.
- Avoid taking any medication which can cause drowsiness.
- Take a picture of the scorpion for identification if it is possible to do so safely.

References:

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