Stingray Injury Treatment

Self-Care at Home

Care of the injured person begins at the scene and is first directed at safe rescue and removal of the victim from the water. A stingray injury that does not need to be checked by a doctor is rare.

- Home first aid measures should be started, but a medical evaluation is also warranted.
- Lay the person down.
- If the person is vomiting, position the person on the side so they do not inhale vomit.
- Stop the bleeding by applying direct pressure with a clean cloth or whatever is available such as a beach towel.
- You may attempt to remove the stinger with tweezers to decrease toxin exposure if doing so will not cause further injury. Be careful not to injure yourself with the stinger.
- If there is no pain, then treat as a puncture wound or laceration by cleaning and disinfecting with soap and water.
- If there is pain, bleeding, or more than a minor wound, and symptoms such as faintness or sweating (which indicate that venom has been absorbed into the body), arrange for transportation to a medical facility.
  - If in a remote area, treat the pain by immersing the injured area in water as hot (but not burning) as the person is able to tolerate (113°F or 45°C) for 30-90 minutes. This neutralizes the painful effects of the venom because the venom is inactivated by heat.
  - Oral pain medication such as acetaminophen (Tylenol) or ibuprofen (Advil) can be given if the person is not vomiting and not allergic to it.
• If you belong to Divers Alert Network (DAN), call their emergency number to obtain medical evacuation assistance and arrange for referral to a medical care facility. Your DAN membership card has details.

Medical Treatment

Stingray injury care is mainly directed at monitoring the injured person’s vital signs, providing pain relief, and treating the wound.

• Vital signs: Treatment for abnormal vital signs is the first step.
  o If blood pressure is low, fluids are given through an IV.
  o Additional medications may be needed to maintain a proper blood pressure.
  o Sometimes, hospitalization is required if the person is very ill.

• Pain: There is no antivenom (antidote) to stingray toxin. The venom is a protein and is broken down by heat, so placing the injured area in water as hot as the person can tolerate (113°F or 45°C) for 30-90 minutes can dramatically relieve the pain. **A word of caution: Once the area is numb, care must be taken to prevent a burn injury from the hot water.**
  o Pain medication, such as narcotics, given through an IV may be needed until the heat has neutralized the toxin.
  o Numbing medications injected into the injured area help to relieve the pain and allow the doctor to explore the wound to look for injuries to structures below without causing further pain.

• Wound care: The doctor cleans the wound, removes foreign matter, and looks for injuries to tendons, nerves, blood vessels, and other body structures. If it has been more than 5 years since the last tetanus booster, one should be given.
  o Antibiotics are usually given because the wound is contaminated with bacteria from the stinger and from the seawater. The doctor needs to consider the specific types of marine organisms that caused the injury when choosing the antibiotics used to treat this wound.
  o The wound is left open, then closed with stitches a few days later if it has not become infected. If the wound is repaired on the initial
visit, it is usually closed loosely to allow any infection to easily drain.

- If important structures, such as nerves, tendons, or arteries, are damaged, then a surgeon (such as a hand specialist) needs to be consulted to assist in the management of the wound. Cleaning and repair in the operating room may be needed.


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