Marine Envenomations / Injury



History

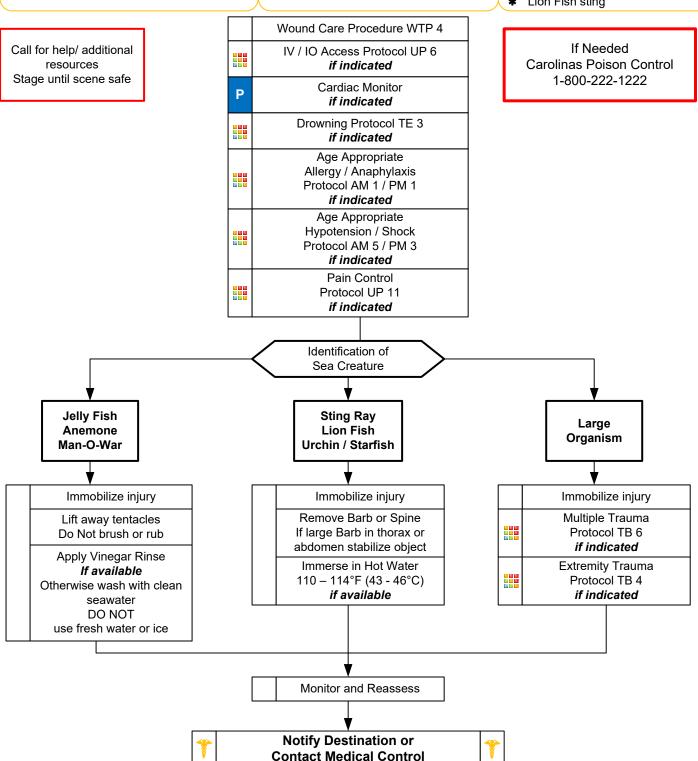
- Type of bite / sting
- Identification of organism
- Previous reaction to marine organism
- Immunocompromised
- Household pet

Signs and Symptoms

- Intense localized pain
- Increased oral secretions
- Nausea / vomiting
- Abdominal cramping
- Allergic reaction / anaphylaxis

Differential

- Jellyfish sting
- Sea Urchin sting
- Sting ray barb
- Coral sting
- Swimmers itch
- Cone Shell sting
- Fish bite
- Lion Fish sting



Marine Envenomations / Injury



Doorlo

* Ensure your safety: Avoid the organism or fragments of the organism as they may impart further sting / injury.

Priority is removal of the patient from the water to prevent drowning.

* Coral:

Coral is covered by various living organisms which are easily dislodged from the structure.

Victim may swim into coral causing small cuts and abrasions and the coral may enter to cuts causing little if any symptoms initially.

The next 24 – 48 hours may reveal an inflammatory reaction with swelling, redness, itching, tenderness and ulceration.

Treatment is flushing with large amounts of fresh water or soapy water then repeating

* Jelly Fish / Anemone / Man-O-War:

Wash the area with fresh seawater to remove tentacles and nematocysts.

Do not apply fresh water or ice as this will cause nematocysts firing as well.

Recent evidence does not demonstrate a clear choice of any solution that neutralizes nematocysts.

Vinegar (immersion for 30 seconds), 50:50 mixture of Baking Soda and Seawater, and even meat tenderizer may have similar effects.

 $Immersion \ in \ warm \ water \ for \ 20 \ minutes, \ 110-114^{\circ}F \ (43-46^{\circ}C), \ has \ recently \ been \ shown \ to \ be \ effective \ in \ pain \ control.$

Shaving cream may be useful in removing the tentacles and nematocysts with a sharp edge (card).

Stimulation of the nematocysts by pressure or rubbing cause the nematocyst to fire even if detached from the jellyfish.

Lift away tentacles as scrapping or rubbing will cause nematocysts firing.

Typically symptoms are immediate stinging sensation on contact, intensity increases over 10 minutes.

Redness and itching usually occur.

Papules, vesicles and pustules may be noted and ulcers may form on the skin.

Increased oral secretions and gastrointestinal cramping, nausea, pain or vomiting may occur.

Muscle spasm, respiratory and cardiovascular collapse may follow.

* Lionfish:

In North Carolina this would typically occur in the home as they are often kept as pets in saltwater aquariums.

Remove any obvious protruding spines and irrigate area with copious amounts of saline.

The venom is heat labile so immersion in hot water, 110 – 114 degrees for 30 to 90 minutes is the treatment of choice but do not delay transport if indicated.

* Stingrays:

Typical injury is swimmer stepping on ray and muscular tail drives 1 – 4 barbs into victim.

Poison is released when barb is broken.

Typical symptoms are immediate pain which increases over 1 – 2 hours. Bleeding may be profuse due to deep puncture wound

Nausea, vomiting, diarrhea, muscle cramping and increased urination and salivation may occur.

Seizures, hypotension and respiratory or cardiovascular collapse may occur.

Irrigate wound with saline. Extract the spine or barb unless in the abdomen or thorax, contact medical control for advise. Immersion in hot water if available for 30 to 90 minutes but do not delay transport.

- * Patients can suffer cardiovascular collapse from both the venom and / or anaphylaxis even in seemingly minor envenomation's.
- * Sea creature stings and bites impart moderate to severe pain.
- **★** Stop the envenomation by inactivation of the venom as appropriate.
- Ensure good wound care, immobilization and pain control.