



Lionfish Stings in Divers in Quintana Roo Mexico

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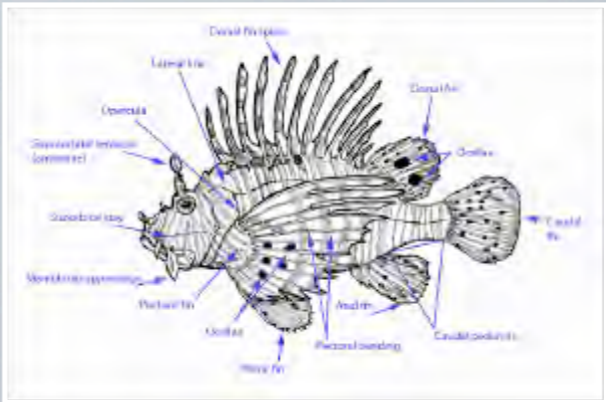
Introduction: The venomous Indo-Pacific ‘Lionfish’ is now regularly observed in habitats within the southeast US region (Florida to North Carolina) the Bahamas, Bermuda and as far south as the south Caribbean. These fish are not native to Atlantic waters and may have a negative impact on marine life. Most of their spines are venomous and can cause extreme pain. Accidents caused by lionfish (*Pterios volitans*) envenomation are characterised by oedema, intense pain, and necrosis at the site of sting. Lionfish are not native to Caribbean waters, marine envenomations by this species have become more frequent as their population grows and spreads.

Method: Data was collected from patients that had accidental envenomations by lion fish stings, from lionfish fishing tournaments where we provided medical care and patients admitted to the emergency room of the General Hospital of Cozumel. Cases were noted over a time period of 3 years. Data input was done into a simple spread sheet.

Results: A total of 33 cases of patients with envenomation were attended, 31 were SCUBA divers and 2 snorkelers. 21 cases were stung while handling the lionfish after catching it, 7 were trying to catch or spear the lionfish and 5 were stung incidentally. 73% were stung for the first time and 27% was repetitive. All of the patients received hot non-scalding water and NSAIDs drugs as treatment. All the patients were responsive to prompt immersion in non-scalding water and all were advised on tetanus prophylaxis and local wound care. No complications were reported.

Discussion: Lionfish stings are common during lionfish tournaments and during breathhold diving spearfishing. Handling lionfish appears to be a commonplace where divers get stung, treatment with hot water is effective and follow up and prophylaxis should be advised in these cases.

Conclusion: As accidental encounters with lionfish become more frequent, is important to continue to understand the mechanisms of the injuries and behavior of divers to be able to generate strategies to prevent or minimize the number of envenomations.



Age	Gender	Activity	Spine Type	Spine Body	Location	Treatment	Time to relief	Complications	Outcome	End time
22	Male	Recreational	Scuba	Right hand	Handling	Hot water, NSAIDs	10	28 hours	Yes	
16	Male	Recreational	Scuba	Left hand	Fishing	Hot water, NSAIDs	5	18 hours	No	
19	Male	Recreational	Scuba	Right hand	Fishing	Hot water, NSAIDs	5	18 hours	No	
30	Male	Recreational	Scuba	Right hand	Fishing	Hot water, NSAIDs	5	18 hours	No	
16	Male	Recreational	Scuba	Right hand	Handling	Hot water, NSAIDs	10	28 hours	No	
16	Male	Recreational	Scuba	Right hand	Handling	Hot water, NSAIDs	10	28 hours	No	
24	Male	Fishing	Scuba	Left hand	Handling	Hot water, NSAIDs	10	48 hours	Yes	
26	Female	Recreational	Scuba	Right hand	Handling	Hot water	10	18 hours	No	
21	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	18 hours	No	
40	Female	Fishing	Scuba	Left hand	Handling	Hot water	5	18 hours	No	
22	Male	Recreational	Scuba	Right hand	Handling	Hot water	5	48 hours	No	
26	Male	Recreational	Scuba	Right hand	Handling	Hot water	5	18 hours	No	
28	Male	Fishing	Scuba	Left hand	Handling	Hot water, NSAIDs	10	28 hours	No	
36	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	18 hours	No	
31	Male	Recreational	Scuba	Left foot	Handling	Hot water, NSAIDs	5	18 hours	No	
20	Male	Recreational	Scuba	Right hand	Handling	Hot water, NSAIDs	10	28 hours	No	
24	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	28 hours	No	
26	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	18 hours	No	
21	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	18 hours	No	
28	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	18 hours	No	
44	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	18 hours	No	
36	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	28 hours	No	
26	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	18 hours	No	
20	Female	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	10	18 hours	No	
26	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	18 hours	No	
29	Male	Fishing	Scuba	Right hand	Handling	Hot water, NSAIDs	5	18 hours	No	