



“From Dinner to Death” Fish Envenomation Presenting as Acute Fulminant Necrotizing Fasciitis of the Arem in an Adult Filipino

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Abstract:

Background: The Philippines is home to a variety of marine animals and as such, marine stings and envenomations are not uncommon. Despite this, there is scarcity of locally published literature discussing its natural course and management. Case: We present the case of EL, a 35/M diagnosed with Grave's Disease, controlled. Patient has good baseline functional capacity prior to envenomation. 33 hours prior to admission, while preparing a fish for dinner (Local Name: Bugao / Burog, *Synanceia verrucosa*), the patient accidentally punctured his left thumb with its spine. Brisk bleeding was noted on the puncture site. A few hours after, patient felt pain involving the entire upper extremity with progressive swelling, bluish discoloration, and bullae formation. 37 hours post injury, the patient consulted at the ER, hypotensive and tachycardic. After vigorous hydration and vasopressor support, he was stabilized to undergo immediate debridement and fasciotomy of the left hand and forearm. Extensive necrosis of the fascia and foul smelling grayish discharge were seen. IV antibiotics and tetanus prophylaxis were given. Post operatively, the patient succumbed from multiple organ dysfunction syndrome. Blood samples and bullae fluid samples were obtained and a heat labile protein toxin was identified. The potent toxin is found in the species of stonefish. Discussion: Stonefish venom consists of 4 biologically active factors: (1) hylauronidase fraction, (2) capillary permeability factor, (3) toxic or lethal fraction, and (4) pain producing factor. The capillary permeability factor is a potent hypotensive agent which has myotoxic and neurotoxic activity. Combination of these factors resulted into the rapid demise of our patient. A high index of suspicion is warranted to prevent mortality and morbidity associated with fish envenomation. While no stonefish antivenom is locally available, simple management consists of removal of protruding spines, aggressive fluid hydration, adequate



analgesia, hot water immersion techniques and adequate empiric antibiotics can be instituted. Conclusions: In this light, increased awareness programs discussing prevention and treatment protocols should be made.

Biography:

Jose Eduardo Duya is a doctor in the Department of Medicine, University of the Philippines, Philippine General Hospital, Philippines.

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